

8/24/05

T. Gibbs

09/14/06

SID 16

## SCORE OVER LENGTH SEARCHES

Attached is a score over length search. This search was developed to overcome limitations in most standard search systems which favor large sequences with high scoring, but lesser overall identity over smaller sequences with higher overall identity. This search is especially useful for relatively small nucleic acid or polypeptide target sequences (antisense, fragments, probes, primers, RNAi, epitopes, haptens, etc.) claimed functionally via a form of hybridization and/or identity language and having defined upper and lower polynucleotide and or polypeptide length limits.

The score over length search is performed by first running the query sequence using examiner-specified identity and polynucleotide or protein length limit parameters, and saving 65,000 hits and 0 alignments from each desired database. The resulting output is reformatted using a Microsoft Word macro and is imported into Excel. The summary table data are then sorted by the ratio of score of each hit sequence divided by its length and the accession numbers for all hits below the examiner's desired score over length parameters are deleted. The remaining accession numbers are used to pull the corresponding sequences from the databases into subdatabases enriched for good hits and the query sequence is re-run against these subdatabases to yield the final results.

The score over length cutoff for this search is 75%

Examiner Please Note: This cover sheet should be included when submitting results to be scanned.

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161786

From: Gibbs, Terra  
Sent: Monday, August 08, 2005 12:05 PM  
To: STIC-Biotech/ChemLib  
Subject: sequence search request...

I have another request for a score over length search:

I need a length limited nucleotide sequence search of SEQ ID NO:16 in USSN 09/436,060, where the returns are rank ordered based on the score over length/ratio as we've discussed. I need the lengths limited to hits between 8 and 80 nucleotides, and I'll take as many hits as you can import into excel (64,000?), and alignments for anything above .75 on the above ratio. Hope this is clear, please call me if it's not. I also need the interference databases searched.

Terra Cotta Gibbs, Ph.D.  
Art Unit 1635  
Remsen Building 2D10  
Mailbox 2C18  
571-272-0758

\*\*\*\*\*

## STAFF USE ONLY

Searcher: \_\_\_\_\_  
Searcher Phone: 2-\_\_\_\_\_  
Date Searcher Picked up: \_\_\_\_\_  
Date Completed: \_\_\_\_\_  
Searcher Prep/Rev. Time: \_\_\_\_\_  
Online Time: \_\_\_\_\_

\*\*\*\*\*

## Type of Search

NA#: \_\_\_\_\_ AA#: \_\_\_\_\_  
Interference: \_\_\_\_\_ SPDI: \_\_\_\_\_  
S/L: \_\_\_\_\_ Oligomer: \_\_\_\_\_  
Encode/Transl: \_\_\_\_\_  
Structure#: \_\_\_\_\_ Text: \_\_\_\_\_  
Inventor: \_\_\_\_\_ Litigation: \_\_\_\_\_

\*\*\*\*\*

## Vendors and cost where applicable

STN: \_\_\_\_\_  
DIALOG: \_\_\_\_\_  
QUESTEL/ORBIT: \_\_\_\_\_  
LEXIS/NEXIS: \_\_\_\_\_  
SEQUENCE SYSTEM: \_\_\_\_\_  
WWW/Internet: \_\_\_\_\_  
Other(Specify): \_\_\_\_\_

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GenCore version 5.1.6  
Copyright (c) 1993 - 2005 Compugen Ltd.

OM nucleic - nucleic search, using sw model

Run on: August 24, 2005, 14:20:26 ; Search time 2 Seconds  
(without alignments)  
3.144 Million cell updates/sec

Title: US-09-436-060A-16

Perfect score: 451

Sequence: 1 99gttgagggtggcct.....aggactggctcacacatgc 451

Scoring table: IDENTITY NUC

Gapop 10.0 , Gapext 0.5

Searched: 295 seqs, 6972 residues

Total number of hits satisfying chosen parameters: 590

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 309 summaries

Database : rge.subdb:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

# SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
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2	54	12.0	66	1	AR154150
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4	46.2	10.2	51	1	BD225880
5	46.2	10.2	51	1	AX019628
6	46.2	10.2	51	1	AX019629
7	43	9.5	51	1	BD225882
8	43	9.5	51	1	AX019631
9	41.4	9.2	51	1	BD225881
10	41.4	9.2	51	1	AX019630
11	38.2	8.5	51	1	BD225883
12	38.2	8.5	51	1	AX019632
13	36	8.0	38	1	BD225837
14	36	8.0	38	1	AX019586
15	31.2	6.9	38	1	BD225838
16	31.2	6.9	38	1	BD225839
17	31.2	6.9	38	1	AX019587
18	31.2	6.9	38	1	AX019588
C 19	31	6.9	31	1	AR279616
C 20	31	6.9	31	1	AR305067
21	31	6.9	31	1	BD071082
C 22	30	6.7	30	1	AR016054
C 23	30	6.7	30	1	AR059215
C 24	30	6.7	30	1	AR063829
C 25	30	6.7	30	1	AR063832
C 26	30	6.7	30	1	AR075526
C 27	30	6.7	30	1	AR161924
C 28	30	6.7	30	1	BD176165
C 29	30	6.7	30	1	I31769
C 30	30	6.7	30	1	AR279619
C 31	30	6.7	30	1	AR279620
C 32	30	6.7	30	1	AR305070
C 33	30	6.7	30	1	AR305071

C 34	30	6.7	30	1	AR306472
C 35	30	6.7	30	1	AR373060
C 36	30	6.7	30	1	AX465471
C 37	30	6.7	30	1	BD023701
C 38	30	6.7	30	1	BD023704
C 39	29	6.4	30	1	A84595
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50	28	6.2	28	1	AR370168
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C 56	27	6.0	27	1	BD023722
C 57	26.8	5.9	30	1	BD225801
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59	26.4	5.9	28	1	AR016063
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61	26.4	5.9	28	1	AR075541
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C 64	26	5.8	26	1	A94988
C 65	26	5.8	26	1	AR016055
66	26	5.8	26	1	AR016061
67	26	5.8	26	1	AR028785
C 68	26	5.8	26	1	AR028786
C 69	26	5.8	26	1	AR059216
C 70	26	5.8	26	1	AR063849
C 71	26	5.8	26	1	AR075527
C 72	26	5.8	26	1	AR075533
C 73	26	5.8	26	1	AR161925
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C 77	26	5.8	26	1	E36508
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C 93	26	5.8	26	1	AR393335
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C 96	26	5.8	26	1	AX033376
C 97	26	5.8	26	1	AX033377
C 98	26	5.8	26	1	AX317988
C 99	26	5.8	26	1	AX468454
C 100	26	5.8	26	1	AX468455
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C 102	26	5.8	26	1	AX810635
C 103	26	5.8	26	1	BD011296
C 104	26	5.8	26	1	BD011297
C 105	26	5.8	26	1	BD023721
106	26	5.8	26	1	BD131325

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ACCESSION:BD058133
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ACCESSION:AR305069
ACCESSION:AR370168
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C 124	24	5.3	24	1	AX058270	ACCESSION:AX058270	C 197	18.4	4.1	20	1	BD225828	ACCESSION:BD225828
C 125	24	5.3	24	1	BD071058	ACCESSION:BD071058	C 198	18.4	4.1	20	1	BD225831	ACCESSION:BD225831
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C 127	24	5.3	24	1	BD084641	ACCESSION:BD084641	C 200	18.4	4.1	20	1	AX019580	ACCESSION:AX019580
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C 146	22	4.9	22	1	AR306490	ACCESSION:AR306490	C 219	15.2	3.4	20	1	AR199735	ACCESSION:AR199735
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AUTHORS  
TITLE  
JOURNAL  
FEATURES  
source

Query Match 12.0%; Score 54; DB 1; Length 62;  
Best Local Similarity 100.0%; Pred. No. 1.4;  
Matches 54; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 GGGTTCCGAGGGTGGCCCTGGAGGGTGGTGGCCATTTTGTCTAACCCCTA 54  
|||||  
Db 61 GGGTTCCGAGGGTGGCCCTGGAGGGTGGTGGCCATTTTGTCTAACCCCTA 8  
|||||

RESULT 2  
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LOCUS  
DEFINITION  
ACCESSION  
VERSION  
KEYWORDS  
SOURCE  
ORGANISM

AR154150 66 bp DNA linear PAT 08-AUG-2001  
Sequence 15 from patent US 6238867.  
AR154150  
AR154150.1 GI:15122203  
Unknown.  
Unknown.  
Unclassified.

REFERENCE  
1 (bases 1 to 66)  
AUTHORS  
TITLE  
JOURNAL  
FEATURES  
source

Roninson, I.B. and Grossman, A.  
Compositions, methods and kits for identifying naturally occurring  
RNA sequences having affinity for RNA-binding proteins  
Patent: US 6238867-A 15 29-MAY-2001;  
Location/Qualifiers  
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Query Match 12.0%; Score 54; DB 1; Length 66;  
Best Local Similarity 100.0%; Pred. No. 1.5;  
Matches 54; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 GGGTTCCGAGGGTGGCCCTGGAGGGTGGTGGCCATTTTGTCTAACCCCTA 54  
|||||  
Db 6 GGGTTCCGAGGGTGGCCCTGGAGGGTGGTGGCCATTTTGTCTAACCCCTA 59  
|||||

RESULT 3  
BD225879  
LOCUS  
DEFINITION  
ACCESSION  
VERSION  
KEYWORDS  
SOURCE  
ORGANISM

BD225879 51 bp DNA linear PAT 17-JUL-2003  
Promoter region of mouse and human telomerase RNA component genes.  
BD225879  
BD225879.1 GI:33035649  
JP 2002509699-A/82.  
synthetic construct  
other sequences: artificial sequences.  
1 (bases 1 to 51)  
Keith, W.N.

REFERENCE  
AUTHORS  
TITLE  
JOURNAL  
COMMENT

Promoter region of mouse and human telomerase RNA component genes  
Patent: JP 2002509699-A 82 02-APR-2002;  
CANCER RESEARCH CAMPAIGN TECHNOLOGY LTD  
OS Artificial Sequence  
PN JP 2002509699-A/82  
PD 02-APR-2002  
PF 29-JAN-1999 JP 2000529424  
PR 29-JAN-1998 GB 9801902.9  
PI WILLIAM NICOL KEITH  
PC  
C12N15/09, A61K31/7105, A61K31/711, A61K35/76, A61K38/00, A61K45/00, PC  
A61K48/00,  
PC A61P35/00, C12N1/15, C12N1/19, C12N1/21, C12N5/10, C12P21/02 PC  
, C12Q1/68//C12N9/12,

PC (A61K35/76,A61K31:522),C12N15/00,A61K37/02,C12N5/00 CC  
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Matches 48; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1 GGGTTGCGAGGGTGGGCGCTGGAGGGGTGGTGGCCATTTTGTCTAACCC 51  
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Db 1 GGGTTGCGGAAAATGGGCGCTGGAGGGGTGGTGGCCATTTTGTCTAACCC 51  
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RESULT 4  
BD225880  
LOCUS AX019628  
DEFINITION Promoter region of mouse and human telomerase RNA component genes.  
ACCESSION BD225880  
VERSION BD25880.1 GI:33035650  
KEYWORDS JP 2002509699-A/83.  
SOURCE synthetic construct  
ORGANISM other sequences; artificial sequences.  
REFERENCE 1 (bases 1 to 51)  
AUTHORS Keith,W.N.  
TITLE Promoter region of mouse and human telomerase RNA component genes  
JOURNAL Patent: JP 2002509699-A 83 02-APR-2002;  
CANCER RESEARCH CAMPAIGN TECHNOLOGY LTD  
COMMENT OS Artificial Sequence  
PN JP 2002509699-A/83  
PD 02-APR-2002  
PP 29-JAN-1999 JP 2000529424  
PR 29-JAN-1998 GB 9801902.9  
PI WILLIAM NICOL KEITH  
PC C12N15/09,A61K31/7105,A61K31/7111,A61K35/76,A61K38/00,A61K45/00, PC  
A61K48/00,  
PC A61P35/00,C12N1/15,C12N1/19,C12N1/21,C12N5/10,C12P21/02 PC  
C12O1/68/C12N9/12.  
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Description of Artificial Sequence: Mutant construct FH Key

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Query Match 10.2%; Score 46.2; DB 1; Length 51;  
Best Local Similarity 94.1%; Pred. No. 4.2;  
Matches 48; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

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RESULT 5  
AX019628  
LOCUS AX019628  
DEFINITION Sequence 82 from Patent WO9938964.  
ACCESSION AX019628  
VERSION AX019628.1 GI:10043542  
KEYWORDS

SOURCE synthetic construct  
ORGANISM synthetic construct  
REFERENCE 1 other sequences; artificial sequences.  
AUTHORS Keith,W.N.  
TITLE Promoter regions of the mouse and human telomerase rna component genes  
JOURNAL Patent: WO 9938964-A 82 05-AUG-1999;  
KEITH WILLIAM NICOL (GB); CANCER RES CAMPAIGN TECH (GB)  
FEATURES Location/Qualifiers  
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/organism="synthetic construct"  
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Query Match 10.2%; Score 46.2; DB 1; Length 51;  
Best Local Similarity 94.1%; Pred. No. 4.2;  
Matches 48; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1 GGGTTGCGAGGGTGGGCGCTGGAGGGGTGGTGGCCATTTTGTCTAACCC 51  
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RESULT 6  
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LOCUS AX019629  
DEFINITION Sequence 83 from Patent WO9938964.  
ACCESSION AX019629  
VERSION AX019629.1 GI:10043543  
KEYWORDS synthetic construct  
SOURCE synthetic construct  
ORGANISM other sequences; artificial sequences.  
REFERENCE 1  
AUTHORS Keith,W.N.  
TITLE Promoter regions of the mouse and human telomerase rna component genes  
JOURNAL Patent: WO 9938964-A 83 05-AUG-1999;  
KEITH WILLIAM NICOL (GB); CANCER RES CAMPAIGN TECH (GB)  
FEATURES Location/Qualifiers  
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/note="Mutant construct"

Query Match 10.2%; Score 46.2; DB 1; Length 51;  
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Qy 1 GGGTTGCGAGGGTGGGCGCTGGAGGGGTGGTGGCCATTTTGTCTAACCC 51  
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RESULT 7  
BD225882  
LOCUS BD225882  
DEFINITION Promoter region of mouse and human telomerase RNA component genes.  
ACCESSION BD225882  
VERSION BD25882.1 GI:33035652  
KEYWORDS JP 2002509699-A/85.  
SOURCE synthetic construct  
ORGANISM synthetic construct  
REFERENCE 1 (bases 1 to 51)  
AUTHORS Keith,W.N.  
TITLE Promoter region of mouse and human telomerase RNA component genes  
JOURNAL Patent: JP 2002509699-A 85 02-APR-2002;  
CANCER RESEARCH CAMPAIGN TECHNOLOGY LTD  
COMMENT OS Artificial Sequence

PN JP 2002509699-A/85  
PD 02-APR-2002  
PF 29-JAN-1999 JP 2000529424  
PR 29-JAN-1998 GB 9801902.9  
PI WILLIAM NICOL KEITH  
PC  
C12N15/09,A61K31/7105,A61K31/711,A61K35/76,A61K38/00,A61K45/00, PC  
A61K48/00,  
PC A61P35/00,C12N1/15,C12N1/19,C12N1/21,C12N5/10,C12P21/02 PC  
,C12Q1/68//C12N9/12,  
PC (A61K35/76,A61K31:522),C12N15/00,A61K37/02,C12N5/00 CC  
Description of Artificial Sequence: Mutant construct FH Key  
Location/Qualifiers  
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RESULT 8  
AX019631  
LOCUS  
DEFINITION  
ACCESSION  
VERSION  
KEYWORDS  
SOURCE  
ORGANISM  
synthetic construct  
other sequences; artificial sequences.  
REFERENCE 1  
AUTHORS  
TITLE  
JOURNAL  
KEITH WILLIAM NICOL (GB); CANCER RES CAMPAIGN TECH (GB)  
FEATURES  
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1..51  
/organism="synthetic construct"  
/mol\_type="unassigned DNA"  
/db\_xref="taxon:32630"  
/note="Mutant construct"  
Query Match 9.5%; Score 43; DB 1; Length 51;  
Best Local Similarity 90.2%; Pred. No. 7.2;  
Matches 46; Conservative 0; Mismatches 5; Indels 0; Gaps 0;  
Qy 1 GGGTTGCGAGGGTGGCGCTGGAGGGTGGTGGCCATTTTGTGCTAACCC 51  
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Db 1 GGGTTGCGAGGGTGGCGCTGGTAAAGTAATGGCCATTTTGTGCTAACCC 51  
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RESULT 9  
BD225881  
LOCUS  
DEFINITION  
ACCESSION  
VERSION  
KEYWORDS  
SOURCE  
ORGANISM  
synthetic construct  
other sequences; artificial sequences.  
REFERENCE 1 (bases 1 to 51)

AUTHORS  
TITLE  
JOURNAL  
COMMENT  
Keith,W.N.  
Promoter region of mouse and human telomerase RNA component genes  
Patent: JP 2002509699-A 84 02-APR-2002;  
CANCER RESEARCH CAMPAIGN TECHNOLOGY LTD  
OS Artificial Sequence  
PN JP 2002509699-A/84  
PD 02-APR-2002  
PF 29-JAN-1999 JP 2000529424  
PR 29-JAN-1998 GB 9801902.9  
PI WILLIAM NICOL KEITH  
PC  
C12N15/09,A61K31/7105,A61K31/711,A61K35/76,A61K38/00,A61K45/00, PC  
A61K48/00,  
PC A61P35/00,C12N1/15,C12N1/19,C12N1/21,C12N5/10,C12P21/02 PC  
,C12Q1/68//C12N9/12,  
PC (A61K35/76,A61K31:522),C12N15/00,A61K37/02,C12N5/00 CC  
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Query Match 9.2%; Score 41.4; DB 1; Length 51;  
Best Local Similarity 88.2%; Pred. No. 9.4;  
Matches 45; Conservative 0; Mismatches 6; Indels 0; Gaps 0;  
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RESULT 10  
AX019630  
LOCUS  
DEFINITION  
ACCESSION  
VERSION  
KEYWORDS  
SOURCE  
ORGANISM  
synthetic construct  
other sequences; artificial sequences.  
REFERENCE 1  
AUTHORS  
TITLE  
JOURNAL  
Keith,W.N.  
Promoter regions of the mouse and human telomerase rna component  
genes  
Patent: WO 9938964-A 84 05-AUG-1999;  
KEITH WILLIAM NICOL (GB); CANCER RES CAMPAIGN TECH (GB)  
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Best Local Similarity 88.2%; Pred. No. 9.4;  
Matches 45; Conservative 0; Mismatches 6; Indels 0; Gaps 0;  
Qy 1 GGGTTGCGAGGGTGGCGCTGGAGGGTGGTGGCCATTTTGTGCTAACCC 51  
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Db 1 GGGTTGCGAGGGTGGCGCTGGTAAAGTAATGGCCATTTTGTGCTAACCC 51  
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RESULT 11  
BD225883  
LOCUS  
DEFINITION  
ACCESSION  
VERSION  
KEYWORDS  
SOURCE  
ORGANISM  
synthetic construct  
other sequences; artificial sequences.  
REFERENCE 1 (bases 1 to 51)

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KEYWORDS      JP 2002509699-A/86.
SOURCE         synthetic construct
ORGANISM       other sequences; artificial sequences.
REFERENCE      1 (bases 1 to 51)
AUTHORS        Keith,W.N.
TITLE          Promoter region of mouse and human telomerase RNA component genes
JOURNAL        CANCER RESEARCH CAMPAIGN TECHNOLOGY LTD
COMMENT        OS Artificial Sequence
               PN JP 2002509699-A/86
               PD 02-APR-2002
               PF 29-JAN-1999 JP 2000529424
               PR 29-JAN-1998 GB 9801902.9
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                 A61K48/00,
                 PC A61P35/00,C12N1/15,C12N1/19,C12N1/21,C12N5/10,C12P21/02 PC
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               Db
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               VERSION AX019632.1 GI:10043546
               KEYWORDS
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               ORGANISM
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               other sequences; artificial sequences.
               REFERENCE
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               AUTHORS
               KEITH,W.N.
               TITLE
               Promoter regions of the mouse and human telomerase rna component
               genes
               JOURNAL
               Patent: WO 938964-A 86 05-AUG-1999;
               KEITH WILLIAM NICOL (GB); CANCER RES CAMPAIGN TECH (GB)
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               VERSION AX019586.1 GI:10043500
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               other sequences; artificial sequences.
               REFERENCE
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               AUTHORS
               KEITH,W.N.
               TITLE
               Promoter regions of the mouse and human telomerase rna component
               genes
               JOURNAL
               Patent: WO 938964-A 40 05-AUG-1999;
               KEITH WILLIAM NICOL (GB); CANCER RES CAMPAIGN TECH (GB)
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               VERSION AX019586.1 GI:10043500
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               synthetic construct
               other sequences; artificial sequences.
               REFERENCE
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               TITLE
               Promoter regions of the mouse and human telomerase rna component
               genes
               JOURNAL
               Patent: WO 938964-A 40 02-APR-2002;
               CANCER RESEARCH CAMPAIGN TECHNOLOGY LTD
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               PD 02-APR-2002
               PF 29-JAN-1999 JP 2000529424
               PR 29-JAN-1998 GB 9801902.9
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               PC C12N15/09,A61K31/7105,A61K31/711,A61K35/76,A61K38/00,A61K45/00, PC
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                 PC A61P35/00,C12N1/15,C12N1/19,C12N1/21,C12N5/10,C12P21/02 PC
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                 PC (A61K35/76,A61K31:522),C12N15/00,A61K37/02,C12N5/00 CC
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               TITLE
               Promoter regions of the mouse and human telomerase rna component
               genes
               JOURNAL
               Patent: WO 938964-A 40 05-AUG-1999;
               KEITH WILLIAM NICOL (GB); CANCER RES CAMPAIGN TECH (GB)
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Db 3 GGGTTGCGAGGCTGGGCTGGAGGGTGGTGCC 38  
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BD225838 38 bp DNA linear PAT 17-JUL-2003  
LOCUS Promoter region of mouse and human telomerase RNA component genes.  
DEFINITION BD225838  
ACCESSION BD225838.1 GI:33035608  
VERSION JP 2002509699-A/41.  
KEYWORDS synthetic construct  
SOURCE synthetic construct  
ORGANISM other sequences; artificial sequences.  
REFERENCE 1 (bases 1 to 38)  
AUTHORS Keith,W.N.  
TITLE Promoter region of mouse and human telomerase RNA component genes  
JOURNAL Patent: JP 2002509699-A 41 02-APR-2002;  
CANCER RESEARCH CAMPAIGN TECHNOLOGY LTD  
OS Artificial Sequence  
PN JP 2002509699-A/41  
PD 02-APR-2002  
PF 29-JAN-1999 JP 2000529424  
PR 29-JAN-1998 GB 9801902.9  
PI WILLIAM NICOL KEITH  
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A61K48/00,  
PC A61P35/00,C12N1/15,C12N1/19,C12N1/21,C12N5/10,C12P21/02 PC  
C12O1/68/C12N9/12,  
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Best Local Similarity 91.7%; Pred.No.36;  
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Db 3 GGGTTGCGAGGCTGGGCTGGAGGGTGGTGCC 38  
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BD225839 38 bp DNA linear PAT 17-JUL-2003  
LOCUS Promoter region of mouse and human telomerase RNA component genes.  
DEFINITION BD225839  
ACCESSION BD225839.1 GI:33035609  
VERSION JP 2002509699-A/42.  
KEYWORDS synthetic construct  
SOURCE synthetic construct  
ORGANISM other sequences; artificial sequences.  
REFERENCE 1 (bases 1 to 38)  
AUTHORS Keith,W.N.  
TITLE Promoter region of mouse and human telomerase RNA component genes  
JOURNAL Patent: JP 2002509699-A 42 02-APR-2002;  
CANCER RESEARCH CAMPAIGN TECHNOLOGY LTD  
OS Artificial Sequence  
PN JP 2002509699-A/42  
PD 02-APR-2002  
PF 29-JAN-1999 JP 2000529424  
PR 29-JAN-1998 GB 9801902.9  
PI WILLIAM NICOL KEITH  
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C12N15/09,A61K31/7105,A61K31/711,A61K35/76,A61K38/00,A61K45/00, PC  
A61K48/00,  
PC A61P35/00,C12N1/15,C12N1/19,C12N1/21,C12N5/10,C12P21/02 PC  
C12O1/68/C12N9/12,  
PC (A61K35/76,A61K31:522),C12N15/00,A61K37/02,C12N5/00 CC  
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Location/Qualifiers  
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FT /organism='Artificial Sequence'.  
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Best Local Similarity 91.7%; Pred.No.36;  
Matches 33; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
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Db 3 GGGTTGCGAGGCTGGGCTGGAGGGTGGTGCC 38  
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BD225839 38 bp DNA linear PAT 17-JUL-2003  
LOCUS Promoter region of mouse and human telomerase RNA component genes.  
DEFINITION BD225839  
ACCESSION BD225839.1 GI:33035609  
VERSION JP 2002509699-A/42.  
KEYWORDS synthetic construct  
SOURCE synthetic construct  
ORGANISM other sequences; artificial sequences.  
REFERENCE 1 (bases 1 to 38)  
AUTHORS Keith,W.N.  
TITLE Promoter region of mouse and human telomerase RNA component genes  
JOURNAL Patent: JP 2002509699-A 42 02-APR-2002;  
CANCER RESEARCH CAMPAIGN TECHNOLOGY LTD  
OS Artificial Sequence  
PN JP 2002509699-A/42  
PD 02-APR-2002  
PF 29-JAN-1999 JP 2000529424  
PR 29-JAN-1998 GB 9801902.9  
PI WILLIAM NICOL KEITH  
PC C12N15/09,A61K31/7105,A61K31/711,A61K35/76,A61K38/00,A61K45/00, PC  
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A61K48/00,  
PC A61P35/00,C12N1/15,C12N1/19,C12N1/21,C12N5/10,C12P21/02 PC  
C12O1/68/C12N9/12,  
PC (A61K35/76,A61K31:522),C12N15/00,A61K37/02,C12N5/00 CC  
Description of Artificial Sequence:Oligonucleotide FH Key  
Location/Qualifiers  
FT source 1..38  
FT /organism='Artificial Sequence'.  
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1..38  
/organism="synthetic construct"  
/mol\_type="genomic DNA"  
/db\_xref="taxon:32630"  
Query Match 6.9%; Score 31.2; DB 1; Length 38;  
Best Local Similarity 91.7%; Pred.No.36;  
Matches 33; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
Oy 1 GGGTTGCGAGGCTGGGCTGGAGGGTGGTGCC 36  
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Db 3 GGGTTGCGAGGCTGGGCTGGAGGGTGGTGCC 38  
|||||  
BD225839 38 bp DNA linear PAT 17-JUL-2003  
LOCUS Promoter region of mouse and human telomerase RNA component genes.  
DEFINITION BD225839  
ACCESSION BD225839.1 GI:33035609  
VERSION JP 2002509699-A/42.  
KEYWORDS synthetic construct  
SOURCE synthetic construct  
ORGANISM other sequences; artificial sequences.  
REFERENCE 1 (bases 1 to 38)  
AUTHORS Keith,W.N.  
TITLE Promoter region of mouse and human telomerase RNA component genes  
JOURNAL Patent: JP 2002509699-A 42 02-APR-2002;  
CANCER RESEARCH CAMPAIGN TECHNOLOGY LTD  
OS Artificial Sequence  
PN JP 2002509699-A/42  
PD 02-APR-2002  
PF 29-JAN-1999 JP 2000529424  
PR 29-JAN-1998 GB 9801902.9  
PI WILLIAM NICOL KEITH  
PC C12N15/09,A61K31/7105,A61K31/711,A61K35/76,A61K38/00,A61K45/00, PC  
C12N15/09,A61K31/7105,A61K31/711,A61K35/76,A61K38/00,A61K45/00, PC  
A61K48/00,  
PC A61P35/00,C12N1/15,C12N1/19,C12N1/21,C12N5/10,C12P21/02 PC  
C12O1/68/C12N9/12,  
PC (A61K35/76,A61K31:522),C12N15/00,A61K37/02,C12N5/00 CC  
Description of Artificial Sequence:Oligonucleotide FH Key  
Location/Qualifiers  
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FT /organism='Artificial Sequence'.  
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A61K48/00,  
PC A61P35/00,C12N1/15,C12N1/19,C12N1/21,C12N5/10,C12P21/02 PC  
C12O1/68/C12N9/12,  
PC (A61K35/76,A61K31:522),C12N15/00,A61K37/02,C12N5/00 CC  
Description of Artificial Sequence:Oligonucleotide FH Key  
Location/Qualifiers  
FT source 1..38  
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1..38  
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/mol\_type="genomic DNA"  
/db\_xref="taxon:32630"  
Query Match 6.9%; Score 31.2; DB 1; Length 38;  
Best Local Similarity 91.7%; Pred.No.36;  
Matches 33; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
Oy 1 GGGTTGCGAGGCTGGGCTGGAGGGTGGTGCC 36  
|||||  
Db 3 GGGTTGCGAGGCTGGGCTGGAGGGTGGTGCC 38  
|||||  
RESULT 17  
AX019587 38 bp DNA linear PAT 07-SEP-2000  
LOCUS Sequence 41 from Patent WO9938964.  
DEFINITION AX019587  
ACCESSION AX019587  
VERSION AX019587.1 GI:10043501  
KEYWORDS synthetic construct  
SOURCE synthetic construct  
ORGANISM other sequences; artificial sequences.  
REFERENCE 1  
AUTHORS Keith,W.N.  
TITLE Promoter regions of the mouse and human telomerase rna component genes  
JOURNAL Patent: WO 9938964-A 41 05-AUG-1999;  
KEITH WILLIAM NICOL (GB); CANCER RES CAMPAIGN TECH (GB)  
FEATURES  
source  
1..38  
/organism="synthetic construct"  
/mol\_type="unassigned DNA"  
/db\_xref="taxon:32630"  
/note="Oligonucleotide"  
Query Match 6.9%; Score 31.2; DB 1; Length 38;  
Best Local Similarity 91.7%; Pred.No.36;  
Matches 33; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
Oy 1 GGGTTGCGAGGCTGGGCTGGAGGGTGGTGCC 36  
|||||  
Db 3 GGGTTGCGAGGCTGGGCTGGAGGGTGGTGCC 38  
|||||  
RESULT 18  
AX019588 38 bp DNA linear PAT 07-SEP-2000  
LOCUS Sequence 42 from Patent WO9938964.  
DEFINITION AX019588  
ACCESSION AX019588  
VERSION AX019588.1 GI:10043502  
KEYWORDS synthetic construct  
SOURCE synthetic construct  
ORGANISM other sequences; artificial sequences.  
REFERENCE 1  
AUTHORS Keith,W.N.  
TITLE Promoter regions of the mouse and human telomerase rna component genes  
JOURNAL Patent: WO 9938964-A 42 05-AUG-1999;  
KEITH WILLIAM NICOL (GB); CANCER RES CAMPAIGN TECH (GB)  
FEATURES  
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/organism="synthetic construct"  
/mol\_type="unassigned DNA"  
/db\_xref="taxon:32630"  
/note="Oligonucleotide"

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/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/note="Oligonucleotide"

Query Match      6.9%; Score 31.2; DB 1; Length 38;
Best Local Similarity 91.7%; Pred. No. 36;
Matches 33; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1 GGGTTGGCGAGGGTGGCCCTGGAGGGGTGGTGGCC 36
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Db 3 GGGTTGGCGAGGGTGGCCCTGGAGGGGTGGTGGCC 38

RESULT 19
AR279616/c
LOCUS      AR279616      31 bp      DNA      linear      PAT 10-APR-2003
DEFINITION Sequence 1 from patent US 6517834.
ACCESSION  AR279616
VERSION     AR279616.1 GI:29714510
KEYWORDS   Unknown.
SOURCE     Unknown.
ORGANISM   Unclassified.
REFERENCE  1 (bases 1 to 31)
AUTHORS   Weinrich,S.L., Atkinson,E.M. III, Lichtsteiner,S.P., Vasserot,A.P.
and Pruzan,R.A.
TITLE     Purified telomerase
JOURNAL   Patent: US 6517834-A 1 11-FEB-2003;
FEATURES   source
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            /organism="unknown"
            /mol_type="genomic DNA"

Query Match      6.9%; Score 31; DB 1; Length 31;
Best Local Similarity 100.0%; Pred. No. 30;
Matches 31; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 42 TTGTCTAACCCCTAACTGAGAGGGCGTAGGC 72
    |||||
Db 31 TTGTCTAACCCCTAACTGAGAGGGCGTAGGC 1

RESULT 20
AR305067/c
LOCUS      AR305067      31 bp      DNA      linear      PAT 12-JUN-2003
DEFINITION Sequence 1 from patent US 6545133.
ACCESSION  AR305067
VERSION     AR305067.1 GI:31694374
KEYWORDS   Unknown.
SOURCE     Unknown.
ORGANISM   Unclassified.
REFERENCE  1 (bases 1 to 31)
AUTHORS   Weinrich,S.L., Atkinson,E.M. III, Lichtsteiner,S.P., Vasserot,A.P.
and Pruzan,R.A.
TITLE     Methods for purifying telomerase
JOURNAL   Patent: US 6545133-A 1 08-APR-2003;
FEATURES   Location/Qualifiers
            1..31
            /organism="unknown"
            /mol_type="genomic DNA"

Query Match      6.9%; Score 31; DB 1; Length 31;
Best Local Similarity 100.0%; Pred. No. 30;
Matches 31; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 42 TTGTCTAACCCCTAACTGAGAGGGCGTAGGC 72
    |||||
Db 31 TTGTCTAACCCCTAACTGAGAGGGCGTAGGC 1

RESULT 21
AR305067/c
LOCUS      AR305067      31 bp      DNA      linear      PAT 12-JUN-2003
DEFINITION Sequence 1 from patent US 6545133.
ACCESSION  AR305067
VERSION     AR305067.1 GI:31694374
KEYWORDS   Unknown.
SOURCE     Unknown.
ORGANISM   Unclassified.
REFERENCE  1 (bases 1 to 31)
AUTHORS   Weinrich,S.L., Atkinson,E.M. III, Lichtsteiner,S.P., Vasserot,A.P.
and Pruzan,R.A.
TITLE     Methods for purifying telomerase
JOURNAL   Patent: US 6545133-A 1 08-APR-2003;
FEATURES   Location/Qualifiers
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            /organism="unknown"
            /mol_type="genomic DNA"

Query Match      6.9%; Score 31; DB 1; Length 31;
Best Local Similarity 100.0%; Pred. No. 30;
Matches 31; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 42 TTGTCTAACCCCTAACTGAGAGGGCGTAGGC 72
    |||||
Db 31 TTGTCTAACCCCTAACTGAGAGGGCGTAGGC 1

RESULT 22
AR016054/c
LOCUS      AR016054      30 bp      DNA      linear      PAT 05-DEC-1998
DEFINITION Sequence 22 from patent US 5776679.
ACCESSION  AR016054
VERSION     AR016054.1 GI:3972331
KEYWORDS   Unknown.
SOURCE     Unknown.
ORGANISM   Unclassified.
REFERENCE  1 (bases 1 to 30)
AUTHORS   Villeponteau,B., Feng,J., Funk,W. and Andrews,W.H.
TITLE     Assays for the DNA component of human telomerase
JOURNAL   Patent: US 5776679-A 22 07-JUL-1998;
FEATURES   Location/Qualifiers
            1..30
            /organism="unknown"
            /mol_type="unassigned DNA"

Query Match      6.7%; Score 30; DB 1; Length 30;
Best Local Similarity 100.0%; Pred. No. 34;
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 77 TGCTTTTGCTCCCGCGCGCTGTTTTCTC 106
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Db 30 TGCTTTTGCTCCCGCGCGCTGTTTTCTC 1

RESULT 23
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BD071082
LOCUS      BD071082      31 bp      RNA      linear      PAT 27-AUG-2002
DEFINITION Modulation of mammalian telomerase by peptide nucleic acids.
ACCESSION  BD071082
VERSION     BD071082.1 GI:22616685
KEYWORDS   unclassified
SOURCE     unclassified
ORGANISM   unclassified.
REFERENCE  1 (bases 1 to 31)
AUTHORS   Shay,J.W., Wright,W.E., Piatyszek,M.A., Corey,D. and Norton,J.C.
TITLE     Modulation of mammalian telomerase by peptide nucleic acids
JOURNAL   Patent: JP 2001517929-A 48 09-OCT-2001;
          GERON CORP
COMMENT    OS Unidentified
          PN JP 2001517929-A/48
          PD 09-OCT-2001
          PF 09-APR-1997 JP 1997536487
          PR 09-APR-1996 US 08/630019
          PI JERRY W SHAY, WOODRING E WRIGHT, MIECZYSLAW A PIATYSZEK, DAVID
          PJ COREY,
          PI JAMES C NORTON
          PC C07K14/00, A61K38/16, C12Q1/68
          CC Strandedness: Single;
          CC Topology: Linear;
          CC Modulation of mammalian telomerase by peptide nucleic acids FH
          Key Location/Qualifiers
          FT source 1..31
          FT /organism='Unidentified'.

FEATURES   source
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            Location/Qualifiers
            /organism="unidentified"
            /mol_type="genomic RNA"
            /db_xref="taxon:32644"

Query Match      6.9%; Score 31; DB 1; Length 31;
Best Local Similarity 100.0%; Pred. No. 30;
Matches 31; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 40 TTTTGTCTAACCCCTAACTGAGAGGGCGTAG 70
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Db 1 TTTTGTCTAACCCCTAACTGAGAGGGCGTAG 31

RESULT 22
AR016054/c
LOCUS      AR016054      30 bp      DNA      linear      PAT 05-DEC-1998
DEFINITION Sequence 22 from patent US 5776679.
ACCESSION  AR016054
VERSION     AR016054.1 GI:3972331
KEYWORDS   Unknown.
SOURCE     Unknown.
ORGANISM   Unclassified.
REFERENCE  1 (bases 1 to 30)
AUTHORS   Villeponteau,B., Feng,J., Funk,W. and Andrews,W.H.
TITLE     Assays for the DNA component of human telomerase
JOURNAL   Patent: US 5776679-A 22 07-JUL-1998;
FEATURES   Location/Qualifiers
            1..30
            /organism="unknown"
            /mol_type="unassigned DNA"

Query Match      6.7%; Score 30; DB 1; Length 30;
Best Local Similarity 100.0%; Pred. No. 34;
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 77 TGCTTTTGCTCCCGCGCGCTGTTTTCTC 106
    |||||
Db 30 TGCTTTTGCTCCCGCGCGCTGTTTTCTC 1

RESULT 23
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AR059215/c  
LOCUS AR059215 30 bp DNA linear PAT 29-SEP-1999  
DEFINITION Sequence 22 from patent US 5837857.  
ACCESSION AR059215  
VERSION AR059215.1 GI:5984792  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unknown.

REFERENCE  
1 (bases 1 to 30)  
AUTHORS Villeponteau,B., Feng,J., Funk,W. and Andrews,W.H.  
TITLE Mammalian telomerase  
JOURNAL Patent: US 5837857-A 22 17-NOV-1998;  
FEATURES Location/Qualifiers  
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/organism="unknown"  
/mol\_type="unassigned DNA"

Query Match 6.7%; Score 30; DB 1; Length 30;  
Best Local Similarity 100.0%; Pred. No. 34;  
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 77 TGCCTTTTGTCTCCCGCGCGCTGTTTTCTC 106  
Db 30 TGCCTTTTGTCTCCCGCGCGCTGTTTTCTC 1

RESULT 24  
AR063829/c  
LOCUS AR063829 30 bp DNA linear PAT 29-SEP-1999  
DEFINITION Sequence 5 from patent US 5846723.  
ACCESSION AR063829  
VERSION AR063829.1 GI:5993137  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unknown.

REFERENCE  
1 (bases 1 to 30)  
AUTHORS Kim,N.Woo., Wu,F., Kealey,J.T., Pruzan,R. and Weinrich,S.L.  
TITLE Methods for detecting the RNA component of telomerase  
JOURNAL Patent: US 5846723-A 5 08-DEC-1998;  
FEATURES Location/Qualifiers  
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/organism="unknown"  
/mol\_type="unassigned DNA"

Query Match 6.7%; Score 30; DB 1; Length 30;  
Best Local Similarity 100.0%; Pred. No. 34;  
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 290 CTGCCACCGCGAAGAGTTGGGCTCTGTCTCAG 319  
Db 30 CTGCCACCGCGAAGAGTTGGGCTCTGTCTCAG 1

RESULT 25  
AR063832/c  
LOCUS AR063832 30 bp DNA linear PAT 29-SEP-1999  
DEFINITION Sequence 8 from patent US 5846723.  
ACCESSION AR063832  
VERSION AR063832.1 GI:5993140  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unknown.

REFERENCE  
1 (bases 1 to 30)  
AUTHORS Kim,N.Woo., Wu,F., Kealey,J.T., Pruzan,R. and Weinrich,S.L.  
TITLE Methods for detecting the RNA component of telomerase  
JOURNAL Patent: US 5846723-A 8 08-DEC-1998;  
FEATURES Location/Qualifiers  
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/organism="unknown"  
/mol\_type="unassigned DNA"

Query Match 6.7%; Score 30; DB 1; Length 30;  
Best Local Similarity 100.0%; Pred. No. 34;  
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 137 CCTGCCCGCTTCCACCGTTTCATTCTAGAGC 166  
Db 30 CCTGCCCGCTTCCACCGTTTCATTCTAGAGC 1

RESULT 26  
AR075526/c  
LOCUS AR075526 30 bp DNA linear PAT 30-AUG-2000  
DEFINITION Sequence 23 from patent US 5958680.  
ACCESSION AR075526  
VERSION AR075526.1 GI:10002274  
KEYWORDS  
SOURCE Unknown.

ORGANISM Unknown.  
REFERENCE  
1 (bases 1 to 30)  
AUTHORS Villeponteau,B., Feng,J., Funk,W. and Andrews,W.H.  
TITLE Mammalian telomerase  
JOURNAL Patent: US 5958680-A 23 28-SEP-1999;  
FEATURES Location/Qualifiers  
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/organism="unknown"  
/mol\_type="unassigned DNA"

Query Match 6.7%; Score 30; DB 1; Length 30;  
Best Local Similarity 100.0%; Pred. No. 34;  
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 77 TGCCTTTTGTCTCCCGCGCGCTGTTTTCTC 106  
Db 30 TGCCTTTTGTCTCCCGCGCGCTGTTTTCTC 1

RESULT 27  
AR161924/c  
LOCUS AR161924 30 bp DNA linear PAT 17-OCT-2001  
DEFINITION Sequence 22 from patent US 6258535.  
ACCESSION AR161924  
VERSION AR161924.1 GI:16228952  
KEYWORDS  
SOURCE Unknown.

ORGANISM Unknown.  
REFERENCE  
1 (bases 1 to 30)  
AUTHORS Villeponteau,B., Feng,J., Funk,W. and Andrews,W.H.  
TITLE Mammalian telomerase  
JOURNAL Patent: US 6258535-A 22 10-JUL-2001;  
FEATURES Location/Qualifiers  
1..30  
/organism="unknown"  
/mol\_type="unassigned DNA"

Query Match 6.7%; Score 30; DB 1; Length 30;  
Best Local Similarity 100.0%; Pred. No. 34;  
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 77 TGCCTTTTGTCTCCCGCGCGCTGTTTTCTC 106  
Db 30 TGCCTTTTGTCTCCCGCGCGCTGTTTTCTC 1

RESULT 28  
BD176165/c  
LOCUS BD176165 30 bp DNA linear PAT 18-MAR-2003  
DEFINITION Mammalian telomerase.  
ACCESSION BD176165  
VERSION BD176165.1 GI:29121871  
KEYWORDS JP 2002272489-A/24.

SOURCE unidentified  
ORGANISM unclassified  
REFERENCE 1 (bases 1 to 30)  
AUTHORS Villeponteau,B., Feng,J., Funk,W. and Andrews,W.H.  
TITLE Mammalian telomerase  
JOURNAL Patent: JP 2002272489-A 24-SEP-2002;  
GERON CORP  
COMMENT OS Unidentified  
PN JP 2002272489-A/24  
PD 24-SEP-2002  
PF 06-MAR-2002 JP 2002061125  
PR 07-JUL-1994 US 08/272102,27-OCT-1994 US 08/330123 PR  
07-JUN-1995 US 08/472802,07-JUN-1995 US 08/482115 PI BRYANT  
VILLEPONTEAU,JUNLI FENG, WALTER FUNK, WILLIAM H ANDREWS PC  
C12N15/09,C12N9/59,C12Q1/68,G01N33/53,G01N33/566,C12N15/00 CC  
Strandedness: Single;  
CC topology: Linear;  
CC Mammalian telomerase  
FH Key Location/Qualifiers  
FT source 1..30  
FT Location/Qualifiers  
FEATURES source  
1..30 /organism="unidentified"  
/mol\_type="genomic DNA"  
/db\_xref="taxon:32644"  
Query Match 6.7%; Score 30; DB 1; Length 30;  
Best Local Similarity 100.0%; Pred. No. 34;  
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Qy 77 TGCTTTTGTCTCCCGCGCGCTGTTTCTC 106  
Db 30 TGCTTTTGTCTCCCGCGCGCTGTTTCTC 1  
RESULT 29  
I31769/c  
LOCUS I31769 30 bp DNA linear PAT 06-FEB-1997  
DEFINITION Sequence 22 from patent US 5583016.  
ACCESSION I31769  
VERSION I31769.1 GI:1822560  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unclassified.  
REFERENCE 1 (bases 1 to 30)  
AUTHORS Villeponteau,B., Feng,J., Funk,W. and Andrews,W.H.  
TITLE Mammalian telomerase  
JOURNAL Patent: US 5583016-A 22 10-DEC-1996;  
FEATURES source  
1..30 /organism="unknown"  
/mol\_type="unassigned DNA"  
Query Match 6.7%; Score 30; DB 1; Length 30;  
Best Local Similarity 100.0%; Pred. No. 34;  
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Qy 77 TGCTTTTGTCTCCCGCGCGCTGTTTCTC 106  
Db 30 TGCTTTTGTCTCCCGCGCGCTGTTTCTC 1  
RESULT 30  
AR279619/c  
LOCUS AR279619 30 bp DNA linear PAT 10-APR-2003  
DEFINITION Sequence 4 from patent US 6517834.  
ACCESSION AR279619  
VERSION AR279619.1 GI:29714513  
KEYWORDS  
SOURCE Unknown.  
Query Match 6.7%; Score 30; DB 1; Length 30;  
Best Local Similarity 100.0%; Pred. No. 34;  
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

ORGANISM Unknown.  
Unclassified.  
REFERENCE 1 (bases 1 to 30)  
AUTHORS Weinrich,S.L., Atkinson,E.M. III, Lichtsteiner,S.P., Vasserot,A.P.  
TITLE Purified telomerase  
JOURNAL Patent: US 6517834-A 4 11-FEB-2003;  
FEATURES source  
1..30 /organism="unknown"  
/mol\_type="genomic DNA"  
Query Match 6.7%; Score 30; DB 1; Length 30;  
Best Local Similarity 100.0%; Pred. No. 34;  
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Qy 167 AACAAAAATGTCAGCTGCTGGCCCGTTC 196  
Db 30 AAACAAAAATGTCAGCTGCTGGCCCGTTC 1  
RESULT 31  
AR279620/c  
LOCUS AR279620 30 bp DNA linear PAT 10-APR-2003  
DEFINITION Sequence 5 from patent US 6517834.  
ACCESSION AR279620  
VERSION AR279620.1 GI:29714514  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unclassified.  
REFERENCE 1 (bases 1 to 30)  
AUTHORS Weinrich,S.L., Atkinson,E.M. III, Lichtsteiner,S.P., Vasserot,A.P.  
TITLE Purified telomerase  
JOURNAL Patent: US 6517834-A 5 11-FEB-2003;  
FEATURES source  
1..30 /organism="unknown"  
/mol\_type="genomic DNA"  
Query Match 6.7%; Score 30; DB 1; Length 30;  
Best Local Similarity 100.0%; Pred. No. 34;  
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Qy 137 CCTGCGCCTTCCACCGTTCATCTTAGAC 166  
Db 30 CCTGCGCCTTCCACCGTTCATCTTAGAC 1  
RESULT 32  
AR305070/c  
LOCUS AR305070 30 bp DNA linear PAT 12-JUN-2003  
DEFINITION Sequence 4 from patent US 6545133.  
ACCESSION AR305070  
VERSION AR305070.1 GI:31694377  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unclassified.  
REFERENCE 1 (bases 1 to 30)  
AUTHORS Weinrich,S.L., Atkinson,E.M. III, Lichtsteiner,S.P., Vasserot,A.P.  
TITLE Methods for purifying telomerase  
JOURNAL Patent: US 6545133-A 4 08-APR-2003;  
FEATURES source  
1..30 /organism="unknown"  
/mol\_type="genomic DNA"  
Query Match 6.7%; Score 30; DB 1; Length 30;  
Best Local Similarity 100.0%; Pred. No. 34;  
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 167 AAACAAAAATGTCAGCTGCTGGCCGCTC 196  
Db 30 AAACAAAAATGTCAGCTGCTGGCCGCTC 1

RESULT 33  
AR305071/c  
LOCUS AR305071 30 bp DNA linear PAT 12-JUN-2003  
DEFINITION Sequence 5 from patent US 6545133.  
ACCESSION AR305071  
VERSION AR305071.1 GI:31694378  
KEYWORDS Unknown.  
SOURCE Unknown.  
ORGANISM Unknown.  
REFERENCE 1 (bases 1 to 30)  
AUTHORS Weinrich, S.L., Atkinson, E.M. III, Lichteteiner, S.P., Vasserot, A.P. and Pruzan, R.A.  
TITLE Methods for purifying telomerase  
JOURNAL Patent: US 6545133-A 5 08-APR-2003;  
FEATURES Location/Qualifiers  
source 1..30  
/organism="unknown"  
/mol\_type="genomic DNA"

Query Match 6.7%; Score 30; DB 1; Length 30;  
Best Local Similarity 100.0%; Pred. No. 34;  
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 137 CTGCGCGCTTCCACCGTTCATTCTAGAGC 166  
Db 30 CTGCGCGCTTCCACCGTTCATTCTAGAGC 1

RESULT 34  
AR306472/c  
LOCUS AR306472 30 bp DNA linear PAT 12-JUN-2003  
DEFINITION Sequence 22 from patent US 6548298.  
ACCESSION AR306472  
VERSION AR306472.1 GI:31696311  
KEYWORDS Unknown.  
SOURCE Unknown.  
ORGANISM Unknown.  
REFERENCE 1 (bases 1 to 30)  
AUTHORS Villeponteau, B., Feng, J., Funk, W. and Andrews, W.H.  
TITLE Mammalian telomerase  
JOURNAL Patent: US 6548298-A 22 15-APR-2003;  
FEATURES Location/Qualifiers  
source 1..30  
/organism="unknown"  
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Query Match 6.7%; Score 30; DB 1; Length 30;  
Best Local Similarity 100.0%; Pred. No. 34;  
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 137 CTGCGCGCTTCCACCGTTCATTCTAGAGC 166  
Db 30 CTGCGCGCTTCCACCGTTCATTCTAGAGC 1

RESULT 35  
AR373060/c  
LOCUS AR373060 30 bp DNA linear PAT 18-DEC-2003  
DEFINITION Sequence 2 from patent US 6602669.  
ACCESSION AR373060  
VERSION AR373060.1 GI:40074991  
KEYWORDS Unknown.  
SOURCE Unknown.  
ORGANISM Unknown.  
REFERENCE 1 (bases 1 to 30)  
AUTHORS Kim, N.W., Wu, F., Kealey, J.T., Pruzan, R. and Weinrich, S.L.  
TITLE Method for detecting and inhibiting RNA component of telomerase  
JOURNAL Patent: JP 2001507229-A 5 05-JUN-2001;  
COMMENT PN JP 2001507229-A/5  
PD 05-JUN-2001  
PF 19-DEC-1997 JP 1998529003  
PR 20-DEC-1996 US 08/770564, 20-DEC-1996 US 08/770565 PI  
NAM WOO KIM, FRED WU, JAMES T KEALEY, RONALD PRUZAN, SCOTT L PR  
WEINRICH  
PC C12N15/09, A61K9/08, A61K31/7105, A61K45/00, A61K48/00, A61P35/00,  
PC C12N5/10, C12N5/12, C12Q1/68, C12Q1/68, C12N15/00, C12N5/00 CC

REFERENCE 1 (bases 1 to 30)  
AUTHORS Letsinger, R.L. and Garimella, V.  
TITLE Method of detection by enhancement of silver staining  
JOURNAL Patent: US 6602669-A 2 05-AUG-2003;  
FEATURES Location/Qualifiers  
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/organism="unknown"  
/mol\_type="genomic DNA"

Query Match 6.7%; Score 30; DB 1; Length 30;  
Best Local Similarity 100.0%; Pred. No. 34;  
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 137 CTGCGCGCTTCCACCGTTCATTCTAGAGC 166  
Db 30 CTGCGCGCTTCCACCGTTCATTCTAGAGC 1

RESULT 36  
AX465471/c  
LOCUS AX465471 30 bp DNA linear PAT 16-JUL-2002  
DEFINITION Sequence 2 from Patent WO0204681.  
ACCESSION AX465471  
VERSION AX465471.1 GI:21899833  
KEYWORDS synthetic construct  
SOURCE synthetic construct  
ORGANISM synthetic construct  
REFERENCE 1  
AUTHORS Letsinger, R.L. and Garimella, V.  
TITLE Method of detection by enhancement of silver staining  
JOURNAL Patent: WO 0204681-A 2 17-JAN-2002;  
FEATURES Location/Qualifiers  
source 1..30  
/organism="synthetic construct"  
/mol\_type="unassigned DNA"  
/db\_xref="taxon:32630"  
/note="synthetic oligomer"

Query Match 6.7%; Score 30; DB 1; Length 30;  
Best Local Similarity 100.0%; Pred. No. 34;  
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 137 CTGCGCGCTTCCACCGTTCATTCTAGAGC 166  
Db 30 CTGCGCGCTTCCACCGTTCATTCTAGAGC 1

RESULT 37  
BD023701/c  
LOCUS BD023701 30 bp DNA linear PAT 27-AUG-2002  
DEFINITION Method for detecting and inhibiting RNA component of telomerase.  
ACCESSION BD023701  
VERSION BD023701.1 GI:22564924  
KEYWORDS JP 2001507229-A/5.  
SOURCE unidentified  
ORGANISM unidentified  
REFERENCE 1 (bases 1 to 30)  
AUTHORS Kim, N.W., Wu, F., Kealey, J.T., Pruzan, R. and Weinrich, S.L.  
TITLE Method for detecting and inhibiting RNA component of telomerase  
JOURNAL Patent: JP 2001507229-A 5 05-JUN-2001;  
COMMENT PN JP 2001507229-A/5  
PD 05-JUN-2001  
PF 19-DEC-1997 JP 1998529003  
PR 20-DEC-1996 US 08/770564, 20-DEC-1996 US 08/770565 PI  
NAM WOO KIM, FRED WU, JAMES T KEALEY, RONALD PRUZAN, SCOTT L PR  
WEINRICH  
PC C12N15/09, A61K9/08, A61K31/7105, A61K45/00, A61K48/00, A61P35/00,  
PC C12N5/10, C12N5/12, C12Q1/68, C12Q1/68, C12N15/00, C12N5/00 CC

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Strandedness: Single;
CC Topology: Linear;
CC /note= 'oligo 16';
FH Key Location/Qualifiers.
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            /db_xref="taxon:32644"
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    Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 290 CTGCACCGCGAAGAGTTGGGCTCTGTCTGAC 319
    |||||
Db 30 CTGCACCGCGAAGAGTTGGGCTCTGTCTGAC 1

RESULT 38
BD023704/c
LOCUS BD023704 30 bp DNA linear PAT 27-AUG-2002
DEFINITION Method for detecting and inhibiting RNA component of telomerase.
ACCESSION BD023704
VERSION BD023704.1 GI:22564927
KEYWORDS JP 2001507229-A/8.
SOURCE unidentified
ORGANISM unclassified.
REFERENCE
    1 (bases 1 to 30)
    Kim,N.W., Wu,F., Kealey,J.T., Pruzan,R. and Weinrich,S.L.
    AUTHORS Kim,N.W., Wu,F., Kealey,J.T., Pruzan,R. and Weinrich,S.L.
    TITLE Method for detecting and inhibiting RNA component of telomerase
    JOURNAL Patent: JP 2001507229-A 8 05-JUN-2001;
    GERON CORP
    PN JP 2001507229-A/8
    PD 05-JUN-2001
    PF 19-DEC-1997 JP 1998529003
    PR 20-DEC-1996 US 08/770564,20-DEC-1996 US 08/770565 PI
    NAM WOO KIM,FRED WU,JAMES T KEALEY,RONALD PRUZAN,SCOTT L PI
    WEINRICH
    PC C12N15/09,A61K9/08,A61K31/7105,A61K45/00,A61K48/00,A61P35/00,
    PC C12N5/10,
    PC C12N9/12,C12Q1/68,C12Q1/68,C12N15/00,C12N5/00 CC
Strandedness: Single;
CC Topology: Linear;
CC /note= 'oligo 21';
FH Key Location/Qualifiers.
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            /mol_type="genomic DNA"
            /db_xref="taxon:32644"
Query Match
    Best Local Similarity 100.0%; Pred. No. 34; Length 30;
    Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 137 CTGCGCCCTTCCACCGTTTCATTCTAGAGC 166
    |||||
Db 30 CTGCGCCCTTCCACCGTTTCATTCTAGAGC 1

RESULT 39
A84595/c
LOCUS A84595 30 bp DNA linear PAT 21-JAN-2000
DEFINITION Sequence 5 from Patent WO9845450.
ACCESSION A84595
VERSION A84595.1 GI:6733511
KEYWORDS
    .
SOURCE unidentified
ORGANISM unclassified.
REFERENCE
    1 (bases 1 to 30)
    Atkinson,E.M. and Kealey,J.T.
    TITLE PURIFIED TELOMERASE
    JOURNAL Patent: WO 9845450-A 5 15-OCT-1998;
    GERON CORP (US)
    FEATURES
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                /db_xref="taxon:32644"
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                /note="N = BIOTINYLATED G"
                /mod_base=OTHER
Query Match
    Best Local Similarity 100.0%; Pred. No. 40; Length 30;
    Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 167 AACAAAAAATGTCAGCTGCTGCGCCGTT 195
    |||||
Db 30 AACAAAAAATGTCAGCTGCTGCGCCGTT 2

RESULT 40
A84596/c
LOCUS A84596 30 bp DNA linear PAT 21-JAN-2000
DEFINITION Sequence 6 from Patent WO9845450.
ACCESSION A84596
VERSION A84596.1 GI:6733512
KEYWORDS
    .
SOURCE unidentified
ORGANISM unclassified.
REFERENCE
    1 (bases 1 to 30)
    Atkinson,E.M. and Kealey,J.T.
    AUTHORS Atkinson,E.M. and Kealey,J.T.
    TITLE PURIFIED TELOMERASE
    JOURNAL Patent: WO 9845450-A 6 15-OCT-1998;
    GERON CORP (US)
    FEATURES
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                /mol_type="unassigned DNA"
                /db_xref="taxon:32644"
        modified_base
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                /mod_base=OTHER
Query Match
    Best Local Similarity 100.0%; Pred. No. 40; Length 30;
    Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 137 CTGCGCCCTTCCACCGTTTCATTCTAGAG 165
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Db 30 CTGCGCCCTTCCACCGTTTCATTCTAGAG 2

RESULT 41
AR079889/c
LOCUS AR079889 30 bp DNA linear PAT 31-AUG-2000
DEFINITION Sequence 2 from patent US 5968506.
ACCESSION AR079889
VERSION AR079889.1 GI:10006642
KEYWORDS
    .
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE
    1 (bases 1 to 30)
    Weinrich,S.L., Atkinson,E.M. III, Lichtsteiner,S.P., Vasserot,A.P.,
    Pruzan,R.A. and Kealey,J.T.
    TITLE Purified telomerase
    JOURNAL Patent: US 5968506-A 2 19-OCT-1999;
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FEATURES
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    /mol_type="genomic DNA"
    /db_xref="taxon:4577"

Query Match
Best Local Similarity 6.4%; Score 29; DB 1; Length 30;
Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 137 CTTGCCCGCTTCACCGTTTCATTCTAGAG 165
Db 30 CTTGCCCGCTTCACCGTTTCATTCTAGAG 2

RESULT 46
A84592/c
LOCUS A84592 31 bp DNA linear PAT 21-JAN-2000
DEFINITION Sequence 2 from Patent W09845450.
ACCESSION A84592
VERSION A84592.1 GI:6733508
KEYWORDS
SOURCE unidentified
ORGANISM unidentified
REFERENCE 1 (bases 1 to 31)
AUTHORS Atkinson,E.M. and Kealey,J.T.
TITLE PURIFIED TELOMERASE
JOURNAL Patent: WO 9845450-A 2 15-OCT-1998;
GERON CORP (US)
FEATURES
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    /note="N = BIOTINYLATED G"
    /mod_base=OTHER
    modified_base 31
    /note="N = BIOTINYLATED A"
    /mod_base=OTHER

Query Match
Best Local Similarity 6.4%; Score 29; DB 1; Length 31;
Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 43 TGTCTAACCTTAAGAGGCGGTAGG 71
Db 30 TGTCTAACCTTAAGAGGCGGTAGG 2

RESULT 47
BD058133/c
LOCUS BD058133 31 bp DNA linear PAT 27-AUG-2002
DEFINITION Purified telomerase.
ACCESSION BD058133
VERSION BD058133.1 GI:22603739
KEYWORDS JP 2001509681-A/2.
SOURCE Zea mays
ORGANISM Zea mays
REFERENCE Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
AUTHORS Spermatoxyta; Magnoliophyta; Liliopsida; Poales; Poaceae; PACCAD
clade; Panicoidae; Andropogoneae; Zea.
TITLE 1 (bases 1 to 31)
JOURNAL Weinrich,S.L., Iii,E.M.A., Lichtsteiner,S.P., Vasserot,A.P.,
AUTHORS Pruzan,R.A. and Kealey,J.T.
COMMENT Purified telomerase
GERON CORP
PN JP 2001509681-A/2
PD 24-JUL-2001
PF 04-APR-1997 JP 1998542718
PI SCOTT L WEINRICH,EDWARD M ATKINSON III,SERGE P LICHTSTEINER,

FEATURES
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Query Match
Best Local Similarity 6.4%; Score 29; DB 1; Length 30;
Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 137 CTTGCCCGCTTCACCGTTTCATTCTAGAG 165
Db 30 CTTGCCCGCTTCACCGTTTCATTCTAGAG 2

RESULT 46
A84592/c
LOCUS A84592 31 bp DNA linear PAT 21-JAN-2000
DEFINITION Sequence 2 from Patent W09845450.
ACCESSION A84592
VERSION A84592.1 GI:6733508
KEYWORDS
SOURCE unidentified
ORGANISM unidentified
REFERENCE 1 (bases 1 to 31)
AUTHORS Atkinson,E.M. and Kealey,J.T.
TITLE PURIFIED TELOMERASE
JOURNAL Patent: WO 9845450-A 2 15-OCT-1998;
GERON CORP (US)
FEATURES
source
    Location/Qualifiers
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    /db_xref="taxon:32644"
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    modified_base 31
    /note="N = BIOTINYLATED A"
    /mod_base=OTHER

Query Match
Best Local Similarity 6.4%; Score 29; DB 1; Length 31;
Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 43 TGTCTAACCTTAAGAGGCGGTAGG 71
Db 30 TGTCTAACCTTAAGAGGCGGTAGG 2

RESULT 47
BD058133/c
LOCUS BD058133 31 bp DNA linear PAT 27-AUG-2002
DEFINITION Purified telomerase.
ACCESSION BD058133
VERSION BD058133.1 GI:22603739
KEYWORDS JP 2001509681-A/2.
SOURCE Zea mays
ORGANISM Zea mays
REFERENCE Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
AUTHORS Spermatoxyta; Magnoliophyta; Liliopsida; Poales; Poaceae; PACCAD
clade; Panicoidae; Andropogoneae; Zea.
TITLE 1 (bases 1 to 31)
JOURNAL Weinrich,S.L., Iii,E.M.A., Lichtsteiner,S.P., Vasserot,A.P.,
AUTHORS Pruzan,R.A. and Kealey,J.T.
COMMENT Purified telomerase
GERON CORP
PN JP 2001509681-A/2
PD 24-JUL-2001
PF 04-APR-1997 JP 1998542718
PI SCOTT L WEINRICH,EDWARD M ATKINSON III,SERGE P LICHTSTEINER,

FEATURES
source
    Location/Qualifiers
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    /organism="Zea mays"
    /mol_type="genomic DNA"
    /db_xref="taxon:4577"

Query Match
Best Local Similarity 6.4%; Score 29; DB 1; Length 31;
Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 43 TGTCTAACCTTAAGAGGCGGTAGG 71
Db 30 TGTCTAACCTTAAGAGGCGGTAGG 2

RESULT 48
AR279618/c
LOCUS AR279618 30 bp DNA linear PAT 10-APR-2003
DEFINITION Sequence 3 from patent US 6517834.
ACCESSION AR279618
VERSION AR279618.1 GI:29714512
KEYWORDS
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 30)
AUTHORS Weinrich,S.L., Atkinson,E.M. III, Lichtsteiner,S.P., Vasserot,A.P.
and Pruzan,R.A.
TITLE Purified telomerase
JOURNAL Patent: US 6517834-A 3 11-PEB-2003;
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    /organism="unknown"
    /mol_type="genomic DNA"

Query Match
Best Local Similarity 6.3%; Score 28.4; DB 1; Length 30;
Matches 29; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 412 GAGCTGTGGGACGTGCACCCAGGACTCGGC 441
Db 30 GAGCTATGGGACGTGCACCCAGGACTCGGC 1

RESULT 49
AR305069/c
LOCUS AR305069 30 bp DNA linear PAT 12-JUN-2003
DEFINITION Sequence 3 from patent US 6545133.
ACCESSION AR305069
VERSION AR305069.1 GI:31694376
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE 1 (bases 1 to 30)
AUTHORS Weinrich,S.L., Atkinson,E.M. III, Lichtsteiner,S.P., Vasserot,A.P.
and Pruzan,R.A.
TITLE Methods for purifying telomerase
JOURNAL Patent: US 6545133-A 3 08-APR-2003;
FEATURES
source
    Location/Qualifiers
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/organism="unknown"
/mol_type="genomic DNA"

Query Match      6.3%; Score 28.4; DB 1; Length 30;
Best Local Similarity 96.7%; Pred. No. 45;
Matches 29; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 412 GAGCTGTGGGACGTGCACCCAGGACTCGG 441
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Db 30 GAGCTATGGGACGTGCACCCAGGACTCGG 1

RESULT 50
LOCUS AR370168 28 bp DNA linear PAT 12-SEP-2003
DEFINITION Sequence 3 from patent US 6300131.
ACCESSION AR370168
VERSION AR370168.1 GI:34606663
KEYWORDS
SOURCE
ORGANISM
REFERENCE 1 (bases 1 to 28)
AUTHORS Greider,C.W. and Le,S.
TITLE Telomerase-associated proteins
JOURNAL Patent: US 6300131-A 3 09-OCT-2001;
FEATURES
source
Location/Qualifiers
1..28
/organism="unknown"
/mol_type="genomic DNA"

Query Match      6.2%; Score 28; DB 1; Length 28;
Best Local Similarity 100.0%; Pred. No. 44;
Matches 28; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 17 GCCTGGGAGGGTGGTGGCCATTTTTC 44
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Db 1 GCCTGGGAGGGTGGTGGCCATTTTTC 28

RESULT 51
LOCUS A84594 30 bp DNA linear PAT 21-JAN-2000
DEFINITION Sequence 4 from Patent WO9845450.
ACCESSION A84594
VERSION A84594.1 GI:6733510
KEYWORDS
SOURCE
ORGANISM
REFERENCE 1 (bases 1 to 30)
AUTHORS Atkinson,E.M. and Kealey,J.T.
TITLE PURIFIED TELOMERASE
JOURNAL Patent: WO 9845450-A 4 15-OCT-1998;
FEATURES
source
Location/Qualifiers
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/organism="unidentified"
/mol_type="unassigned DNA"
/db_xref="taxon:32644"
modified_base 1
/note="N = BIOTINYLATED G"
/mod_base=OTHER

Query Match      6.1%; Score 27.4; DB 1; Length 30;
Best Local Similarity 96.6%; Pred. No. 52;
Matches 28; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 412 GAGCTGTGGGACGTGCACCCAGGACTCGG 440
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Db 30 GAGCTATGGGACGTGCACCCAGGACTCGG 2

/organism="unknown"
/mol_type="genomic DNA"

Query Match      6.3%; Score 28.4; DB 1; Length 30;
Best Local Similarity 96.7%; Pred. No. 45;
Matches 29; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 412 GAGCTGTGGGACGTGCACCCAGGACTCGG 441
      |||||
Db 30 GAGCTATGGGACGTGCACCCAGGACTCGG 1

RESULT 52
LOCUS AR079891/c 30 bp DNA linear PAT 31-AUG-2000
DEFINITION Sequence 4 from patent US 5968506.
ACCESSION AR079891
VERSION AR079891.1 GI:10006644
KEYWORDS
SOURCE
ORGANISM
REFERENCE 1 (bases 1 to 30)
AUTHORS Weinrich,S.L., Atkinson,E.M. III, Lichtsteiner,S.P., Vasserot,A.P.,
Pruzan,R.A. and Kealey,J.T.
TITLE Purified telomerase
JOURNAL Patent: US 5968506-A 4 19-OCT-1999;
FEATURES
source
Location/Qualifiers
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/mol_type="unassigned DNA"

Query Match      6.1%; Score 27.4; DB 1; Length 30;
Best Local Similarity 96.6%; Pred. No. 52;
Matches 28; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 412 GAGCTGTGGGACGTGCACCCAGGACTCGG 440
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Db 30 GAGCTATGGGACGTGCACCCAGGACTCGG 2

/organism="unknown"
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Query Match      6.2%; Score 28; DB 1; Length 28;
Best Local Similarity 100.0%; Pred. No. 44;
Matches 28; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 17 GCCTGGGAGGGTGGTGGCCATTTTTC 44
      |||||
Db 1 GCCTGGGAGGGTGGTGGCCATTTTTC 28

RESULT 53
LOCUS BD058135/c 30 bp DNA linear PAT 27-AUG-2002
DEFINITION Purified telomerase.
ACCESSION BD058135
VERSION BD058135.1 GI:22603741
KEYWORDS
SOURCE
ORGANISM
REFERENCE 1 (bases 1 to 30)
AUTHORS Weinrich,S.L., Iii,E.M.A., Lichtsteiner,S.P., Vasserot,A.P.,
Pruzan,R.A. and Kealey,J.T.
TITLE Purified telomerase
JOURNAL Patent: JP 2001509681-A 4 24-JUL-2001;
COMMENT GERON CORP
PN JP 2001509681-A/4
PD 24-JUL-2001
PF 04-APR-1997 JP 1998542718
PI SCOTT L WEINRICH, EDWARD M ATKINSON III, SERGE P LICHTSTEINER,
PI ALAIN P VASSEROT, RONALD A PRUZAN, JAMES T KEALEY PC
C12N15/54, C12N9/12, C07K16/40, C12Q1/68, C07K14/47 CC Strandedness:
Single;
CC Topology: Linear;
CC /mod_base= OTHER
CC /note= 'N = biotinylated G'
CC /note= 'oligonucleotide 5'
FH Key Location/Qualifiers
FT modified_base 1
Location/Qualifiers
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/organism="Zea mays"
/mol_type="genomic DNA"
/db_xref="taxon:4577"

Query Match      6.1%; Score 27.4; DB 1; Length 30;
Best Local Similarity 96.6%; Pred. No. 52;
Matches 28; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 412 GAGCTGTGGGACGTGCACCCAGGACTCGG 440
      |||||
Db 30 GAGCTATGGGACGTGCACCCAGGACTCGG 2
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RESULT 54  
AR063850/c  
LOCUS AX317989 27 bp DNA linear PAT 27-SEP-1999  
DEFINITION Sequence 26 from patent US 5846723.  
ACCESSION AR063850  
VERSION AR063850.1 GI:5993158  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unknown.  
REFERENCE 1 (bases 1 to 27)  
AUTHORS Kim,N.Woo., Wu,F., Kealey,J.T., Pruzan,R. and Weinrich,S.L.  
TITLE Methods for detecting the RNA component of telomerase  
JOURNAL Patent: US 5846723-A 26 08-DEC-1998;  
FEATURES  
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/organism="unknown"  
/mol\_type="unassigned DNA"

Query Match 6.0%; Score 27; DB 1; Length 27;  
Best Local Similarity 100.0%; Pred. No. 50;  
Matches 27; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 144 CCTTCCACCGTTCATTCTAGAGCAAC 170  
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Db 27 CCTTCCACCGTTCATTCTAGAGCAAC 1

RESULT 55  
AX317989/c  
LOCUS AX317989 27 bp DNA linear PAT 14-DEC-2001  
DEFINITION Sequence 2 from Patent WO0190409.  
ACCESSION AX317989  
VERSION AX317989.1 GI:17900798  
KEYWORDS  
SOURCE synthetic construct  
ORGANISM synthetic construct  
other sequences; artificial sequences.  
REFERENCE 1  
AUTHORS Chen,X.Q. and Anker,P.  
TITLE Cancer diagnosis method  
JOURNAL Patent: WO 0190409-A 2 29-NOV-2001;  
Chen, Xu Qi (US); Stroun, Maurice (CH); Anker, Philippe (CH)  
FEATURES  
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/organism="synthetic construct"  
/mol\_type="unassigned DNA"  
/db\_xref="taxon:32630"

Query Match 6.0%; Score 27; DB 1; Length 27;  
Best Local Similarity 100.0%; Pred. No. 50;  
Matches 27; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 144 CCTTCCACCGTTCATTCTAGAGCAAC 170  
|||||  
Db 27 CCTTCCACCGTTCATTCTAGAGCAAC 1

RESULT 56  
BD023722/c  
LOCUS BD023722 27 bp DNA linear PAT 27-AUG-2002  
DEFINITION Method for detecting and inhibiting RNA component of telomerase.  
ACCESSION BD023722  
VERSION BD023722.1 GI:22564945  
KEYWORDS JP 2001507229-A/26.  
SOURCE unidentified  
ORGANISM unidentified  
REFERENCE 1 (bases 1 to 27)  
AUTHORS Kim,N.W., Wu,F., Kealey,J.T., Pruzan,R. and Weinrich,S.L.  
TITLE Method for detecting and inhibiting RNA component of telomerase

JOURNAL Patent: JP 2001507229-A 26 05-JUN-2001;  
GERON CORP  
PN JP 2001507229-A/26  
PD 05-JUN-2001  
PF 19-DEC-1997 JP 1998529003  
PR 20-DEC-1996 US 08/770564,20-DEC-1996 US 08/770565 PI  
NAM WOO KIM, FRED WU, JAMES T KEALEY, RONALD PRUZAN, SCOTT L PI  
WEINRICH  
PC C12N15/09,A61K9/08,A61K31/7105,A61K45/00,A61K48/00,A61P35/00,  
PC C12N5/10,  
PC C12N9/12,C12Q1/68,C12Q1/68,C12N15/00,C12N5/00 CC  
Strandedness: Single;  
CC Topology: Linear;  
CC /note='hTR reverse primer'  
FH Key Location/Qualifiers  
1..27 Location/Qualifiers  
/organism="unidentified"  
/mol\_type="genomic DNA"  
/db\_xref="taxon:32644"

Query Match 6.0%; Score 27; DB 1; Length 27;  
Best Local Similarity 100.0%; Pred. No. 50;  
Matches 27; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 144 CCTTCCACCGTTCATTCTAGAGCAAC 170  
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Db 27 CCTTCCACCGTTCATTCTAGAGCAAC 1

RESULT 57  
BD225801/c  
LOCUS BD225801 30 bp DNA linear PAT 17-JUL-2003  
DEFINITION Promoter region of mouse and human telomerase RNA component genes.  
ACCESSION BD225801  
VERSION BD225801.1 GI:33035571  
KEYWORDS JP 2002509699-A/4.  
SOURCE synthetic construct  
ORGANISM synthetic construct  
other sequences; artificial sequences.  
REFERENCE 1 (bases 1 to 30)  
AUTHORS Keith,W.N.  
TITLE Promoter region of mouse and human telomerase RNA component genes  
JOURNAL Patent: JP 2002509699-A 4 02-APR-2002;  
CANCER RESEARCH CAMPAIGN TECHNOLOGY LTD  
OS Artificial Sequence  
PN JP 2002509699-A/4  
PD 02-APR-2002  
PF 29-JAN-1999 JP 2000529424  
PR 29-JAN-1998 GB 9801902.9  
PI WILLIAM NICOL KEITH  
PC C12N15/09,A61K31/7105,A61K31/711,A61K35/76,A61K38/00,A61K45/00, PC  
A61K48/00,  
PC A61P35/00,C12N1/15,C12N1/19,C12N1/21,C12N5/10,C12P21/02 PC  
,C12Q1/68/C12N9/12,  
PC (A61K35/76,A61K31:522),C12N15/00,A61K37/02,C12N5/00 CC  
Description of Artificial Sequence: Primer  
FH Key Location/Qualifiers  
1..30 Location/Qualifiers  
FT source  
1..30 /organism='Artificial Sequence'.  
FT Location/Qualifiers  
1..30  
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/mol\_type="genomic DNA"  
/db\_xref="taxon:32630"

Query Match 5.9%; Score 26.8; DB 1; Length 30;  
Best Local Similarity 93.3%; Pred. No. 58;  
Matches 28; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 46 CTAACCTCACTGAGAGGGCGTAGCGCC 75  
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FT source 1..28 /organism='Unidentified'.
FT Location/Qualifiers
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    /mol_type="genomic DNA"
    /db_xref="taxon:32644"

Query Match 5.8%; Score 26.4; DB 1; Length 28;
Best Local Similarity 96.4%; Pred. No. 57;
Matches 27; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 17 GCCTGGAGGGGTGGTGGCCATTTTGG 44
Db 1 GCCTGGAGGGGTGGTGGCTATTTTGG 28

RESULT 63
LOCUS A94987 26 bp DNA linear PAT 26-JAN-2000
DEFINITION Sequence 1 from Patent EP0926245.
ACCESSION A94987
VERSION A94987.1 GI:6779167
KEYWORDS
SOURCE unidentified
ORGANISM unidentified
REFERENCE 1 (bases 1 to 26)
AUTHORS Emrich,T.D.
TITLE Method for detection of carcinoma of the urinary bladder within a
JOURNAL urine sample
PATENT: EP 0926245-A 1 30-JUN-1999;
ROCHE DIAGNOSTICS GMBH (DE)
FEATURES
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    /mol_type="unassigned DNA"
    /db_xref="taxon:32644"

Query Match 5.8%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 56;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 54 AACTGAGAAGGGCGTAGGCGCGTGC 79
Db 1 AACTGAGAAGGGCGTAGGCGCGTGC 26

RESULT 64
LOCUS A94988 26 bp DNA linear PAT 26-JAN-2000
DEFINITION Sequence 2 from Patent EP0926245.
ACCESSION A94988
VERSION A94988.1 GI:6779168
KEYWORDS
SOURCE unidentified
ORGANISM unidentified
REFERENCE 1 (bases 1 to 26)
AUTHORS Emrich,T.D.
TITLE Method for detection of carcinoma of the urinary bladder within a
JOURNAL urine sample
PATENT: EP 0926245-A 2 30-JUN-1999;
ROCHE DIAGNOSTICS GMBH (DE)
FEATURES
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    /mol_type="unassigned DNA"
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Query Match 5.8%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 56;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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Qy 145 CTTCCACCGTTCATTTCTAGAGCAAAAC 170
Db 26 CTTCCACCGTTCATTTCTAGAGCAAAAC 1

RESULT 65
LOCUS AR016055/c 26 bp DNA linear PAT 05-DEC-1998
DEFINITION Sequence 23 from patent US 5776679.
ACCESSION AR016055
VERSION AR016055.1 GI:3972332
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE 1 (bases 1 to 26)
AUTHORS Villeponteau,B., Feng,J., Funk,W. and Andrews,W.H.
TITLE Assays for the DNA component of human telomerase
JOURNAL Patent: US 5776679-A 23 07-JUL-1998;
FEATURES
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    /mol_type="unassigned DNA"

Query Match 5.8%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 56;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 145 CTTCCACCGTTCATTTCTAGAGCAAAAC 170
Db 26 CTTCCACCGTTCATTTCTAGAGCAAAAC 1

RESULT 66
LOCUS AR016061 26 bp DNA linear PAT 05-DEC-1998
DEFINITION Sequence 29 from patent US 5776679.
ACCESSION AR016061
VERSION AR016061.1 GI:3972338
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE 1 (bases 1 to 26)
AUTHORS Villeponteau,B., Feng,J., Funk,W. and Andrews,W.H.
TITLE Assays for the DNA component of human telomerase
JOURNAL Patent: US 5776679-A 29 07-JUL-1998;
FEATURES
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    /mol_type="unassigned DNA"

Query Match 5.8%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 56;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 45 TCTAACCCCTAACTGAGAGGGCGGTAG 70
Db 1 TCTAACCCCTAACTGAGAGGGCGGTAG 26

RESULT 67
LOCUS AR028785 26 bp DNA linear PAT 29-SEP-1999
DEFINITION Sequence 25 from patent US 5858777.
ACCESSION AR028785
VERSION AR028785.1 GI:5940758
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE 1 (bases 1 to 26)
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AUTHORS Villeponteau,B., Feng,J., Andrews,W.H. and Adams,R.R.  
TITLE Methods and reagents for regulating telomere length and telomerase activity  
JOURNAL Patent: US 5858777-A 25 12-JAN-1999;  
FEATURES Location/Qualifiers  
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/organism="unknown"  
/mol\_type="unassigned DNA"

Query Match 5.8%; Score 26; DB 1; Length 26;  
Best Local Similarity 100.0%; Pred. No. 56;  
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 45 TCTAACCTTAAGGAGGCGGTAG 70  
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Db 1 TCTAACCTTAAGGAGGCGGTAG 26

RESULT 69  
AR028786/c  
LOCUS AR028786 26 bp DNA linear PAT 29-SEP-1999  
DEFINITION Sequence 26 from patent US 5858777.  
ACCESSION AR028786  
VERSION AR028786.1 GI:5940759  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unclassified.  
REFERENCE 1 (bases 1 to 26)  
AUTHORS Villeponteau,B., Feng,J., Andrews,W.H. and Adams,R.R.  
TITLE Methods and reagents for regulating telomere length and telomerase activity  
JOURNAL Patent: US 5858777-A 26 12-JAN-1999;  
FEATURES Location/Qualifiers  
source 1..26  
/organism="unknown"  
/mol\_type="unassigned DNA"

Query Match 5.8%; Score 26; DB 1; Length 26;  
Best Local Similarity 100.0%; Pred. No. 56;  
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 145 CTTCCACCGTTCATTCTAGAGCAAC 170  
|||||  
Db 26 CTTCCACCGTTCATTCTAGAGCAAC 1

RESULT 69  
AR059216/c  
LOCUS AR059216 26 bp DNA linear PAT 29-SEP-1999  
DEFINITION Sequence 23 from patent US 5837857.  
ACCESSION AR059216  
VERSION AR059216.1 GI:5984793  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unclassified.  
REFERENCE 1 (bases 1 to 26)  
AUTHORS Villeponteau,B., Feng,J., Funk,W. and Andrews,W.H.  
TITLE Mammalian telomerase  
JOURNAL Patent: US 5837857-A 23 17-NOV-1998;  
FEATURES Location/Qualifiers  
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/mol\_type="unassigned DNA"

Query Match 5.8%; Score 26; DB 1; Length 26;  
Best Local Similarity 100.0%; Pred. No. 56;  
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 145 CTTCCACCGTTCATTCTAGAGCAAC 170  
|||||  
Db 26 CTTCCACCGTTCATTCTAGAGCAAC 1

RESULT 70  
AR063849  
LOCUS AR063849 26 bp DNA linear PAT 29-SEP-1999  
DEFINITION Sequence 25 from patent US 5846723.  
ACCESSION AR063849  
VERSION AR063849.1 GI:5993157  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unclassified.  
REFERENCE 1 (bases 1 to 26)  
AUTHORS Kim,N.Woo., Wu,F., Kealey,J.T., Pruzan,R. and Weinrich,S.L.  
TITLE Methods for detecting the RNA component of telomerase  
JOURNAL Patent: US 5846723-A 25 08-DEC-1998;  
FEATURES Location/Qualifiers  
source 1..26  
/organism="unknown"  
/mol\_type="unassigned DNA"

Query Match 5.8%; Score 26; DB 1; Length 26;  
Best Local Similarity 100.0%; Pred. No. 56;  
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 60 GAAGGGCGTAGGCGCGTCTTTTGC 85  
|||||  
Db 1 GAAGGGCGTAGGCGCGTCTTTTGC 26

RESULT 71  
AR075527/c  
LOCUS AR075527 26 bp DNA linear PAT 30-AUG-2000  
DEFINITION Sequence 24 from patent US 5958680.  
ACCESSION AR075527  
VERSION AR075527.1 GI:10002275  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unclassified.  
REFERENCE 1 (bases 1 to 26)  
AUTHORS Villeponteau,B., Feng,J., Funk,W. and Andrews,W.H.  
TITLE Mammalian telomerase  
JOURNAL Patent: US 5958680-A 24 28-SEP-1999;  
FEATURES Location/Qualifiers  
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/mol\_type="unassigned DNA"

Query Match 5.8%; Score 26; DB 1; Length 26;  
Best Local Similarity 100.0%; Pred. No. 56;  
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 145 CTTCCACCGTTCATTCTAGAGCAAC 170  
|||||  
Db 26 CTTCCACCGTTCATTCTAGAGCAAC 1

RESULT 72  
AR075533  
LOCUS AR075533 26 bp DNA linear PAT 30-AUG-2000  
DEFINITION Sequence 30 from patent US 5958680.  
ACCESSION AR075533  
VERSION AR075533.1 GI:10002281  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unclassified.  
REFERENCE 1 (bases 1 to 26)  
AUTHORS Villeponteau,B., Feng,J., Funk,W. and Andrews,W.H.  
TITLE Mammalian telomerase  
JOURNAL Patent: US 5958680-A 30 28-SEP-1999;  
FEATURES Location/Qualifiers

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Db	1	TCTAACCCCTAACTGAGAAGGCGGTAG 26					
RESULT 73							
AR161925/c							
LOCUS		AR161925	26 bp	DNA	linear	PAT 17-OCT-2001	
DEFINITION		Sequence 23 from patent US 6258535.					
ACCESSION		AR161925					
VERSION		AR161925.1 GI:16228953					
KEYWORDS		Unknown.					
SOURCE		Unknown.					
ORGANISM		Unclassified.					
REFERENCE		1 (bases 1 to 26)					
AUTHORS		Villeponteau,B., Feng,J., Funk,W. and Andrews,W.H.					
TITLE		Mammalian telomerase					
JOURNAL		Patent: US 6258535-A 23 10-JUL-2001;					
FEATURES		Location/Qualifiers					
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Query Match		5.8%; Score 26; DB 1; Length 26;					
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Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;							
QY	145	CTTCCACCGTTCAATCTAGAGCAAAC 170					
Db	26	CTTCCACCGTTCAATCTAGAGCAAAC 1					
RESULT 74							
BD176166/c							
LOCUS		BD176166	26 bp	DNA	linear	PAT 18-MAR-2003	
DEFINITION		Mammalian telomerase.					
ACCESSION		BD176166					
VERSION		BD176166.1 GI:29121872					
KEYWORDS		JP 2002272489-A/25.					
SOURCE		unidentified					
ORGANISM		unclassified.					
REFERENCE		1 (bases 1 to 26)					
AUTHORS		Villeponteau,B., Feng,J., Funk,W. and Andrews,W.H.					
TITLE		Mammalian telomerase					
JOURNAL		Patent: JP 2002272489-A 25 24-SEP-2002;					
COMMENT		GERON CORP					
FEATURES		Location/Qualifiers					
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Best Local Similarity		100.0%; Pred. No. 56;					
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;							
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Db	1	TCTAACCCCTAACTGAGAAGGCGGTAG 26					
RESULT 75							
BD176171							
LOCUS		BD176171	26 bp	DNA	linear	PAT 18-MAR-2003	
DEFINITION		Mammalian telomerase.					
ACCESSION		BD176171					
VERSION		BD176171.1 GI:29121877					
KEYWORDS		JP 2002272489-A/30.					
SOURCE		unidentified					
ORGANISM		unclassified.					
REFERENCE		1 (bases 1 to 26)					
AUTHORS		Villeponteau,B., Feng,J., Funk,W. and Andrews,W.H.					
TITLE		Mammalian telomerase					
JOURNAL		Patent: JP 2002272489-A 30 24-SEP-2002;					
COMMENT		GERON CORP					
FEATURES		Location/Qualifiers					
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Best Local Similarity		100.0%; Pred. No. 56;					
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;							
QY	45	TCTAACCCCTAACTGAGAAGGCGGTAG 70					
Db	1	TCTAACCCCTAACTGAGAAGGCGGTAG 26					
RESULT 76							
E36507							
LOCUS		E36507	26 bp	DNA	linear	PAT 18-JUN-2001	
DEFINITION		Method for detecting bladder cancer in urine samples.					
ACCESSION		E36507					
VERSION		E36507.1 GI:13022704					
KEYWORDS		JP 1999243995-A/1.					
SOURCE		synthetic construct					
ORGANISM		other sequences; artificial sequences.					
REFERENCE		1 (bases 1 to 26)					
AUTHORS		Thomas,E.					
TITLE		Method for detecting bladder cancer in urine samples					
JOURNAL		Patent: JP 1999243995-A 1 14-SEP-1999;					
COMMENT		ROCHE DIAGNOSTICS GMBH					
FEATURES		Location/Qualifiers					
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Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;							
QY	45	TCTAACCCCTAACTGAGAAGGCGGTAG 70					
Db	1	TCTAACCCCTAACTGAGAAGGCGGTAG 26					
RESULT 73							
AR161925/c							
LOCUS		AR161925	26 bp	DNA	linear	PAT 17-OCT-2001	
DEFINITION		Sequence 23 from patent US 6258535.					
ACCESSION		AR161925					
VERSION		AR161925.1 GI:16228953					
KEYWORDS		Unknown.					
SOURCE		Unknown.					
ORGANISM		Unclassified.					
REFERENCE		1 (bases 1 to 26)					
AUTHORS		Villeponteau,B., Feng,J., Funk,W. and Andrews,W.H.					
TITLE		Mammalian telomerase					
JOURNAL		Patent: US 6258535-A 23 10-JUL-2001;					
FEATURES		Location/Qualifiers					
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QY	145	CTTCCACCGTTCAATCTAGAGCAAAC 170					
Db	26	CTTCCACCGTTCAATCTAGAGCAAAC 1					
RESULT 74							
BD176166/c							
LOCUS		BD176166	26 bp	DNA	linear	PAT 18-MAR-2003	
DEFINITION		Mammalian telomerase.					
ACCESSION		BD176166					
VERSION		BD176166.1 GI:29121872					
KEYWORDS		JP 2002272489-A/25.					
SOURCE		unidentified					
ORGANISM		unclassified.					
REFERENCE		1 (bases 1 to 26)					
AUTHORS		Villeponteau,B., Feng,J., Funk,W. and Andrews,W.H.					
TITLE		Mammalian telomerase					
JOURNAL		Patent: JP 2002272489-A 25 24-SEP-2002;					
COMMENT		GERON CORP					
FEATURES		Location/Qualifiers					
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Best Local Similarity		100.0%; Pred. No. 56;					
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;							
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Db	26	CTTCCACCGTTCAATCTAGAGCAAAC 1					
RESULT 75							
BD176171							
LOCUS		BD176171	26 bp	DNA	linear	PAT 18-MAR-2003	
DEFINITION		Mammalian telomerase.					
ACCESSION		BD176171					
VERSION		BD176171.1 GI:29121877					
KEYWORDS		JP 2002272489-A/30.					
SOURCE		unidentified					
ORGANISM		unclassified.					
REFERENCE		1 (bases 1 to 26)					
AUTHORS		Villeponteau,B., Feng,J., Funk,W. and Andrews,W.H.					
TITLE		Mammalian telomerase					
JOURNAL		Patent: JP 2002272489-A 30 24-SEP-2002;					
COMMENT		GERON CORP					
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Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;							
QY	45	TCTAACCCCTAACTGAGAAGGCGGTAG 70					
Db	1	TCTAACCCCTAACTGAGAAGGCGGTAG 26					
RESULT 76							
E36507							
LOCUS		E36507	26 bp	DNA	linear	PAT 18-JUN-2001	
DEFINITION		Method for detecting bladder cancer in urine samples.					
ACCESSION		E36507					
VERSION		E36507.1 GI:13022704					
KEYWORDS		JP 1999243995-A/1.					
SOURCE		synthetic construct					
ORGANISM		other sequences; artificial sequences.					
REFERENCE		1 (bases 1 to 26)					
AUTHORS		Thomas,E.					
TITLE		Method for detecting bladder cancer in urine samples					
JOURNAL		Patent: JP 1999243995-A 1 14-SEP-1999;					
COMMENT		ROCHE DIAGNOSTICS GMBH					
FEATURES		Location/Qualifiers					
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Best Local Similarity		100.0%; Pred. No. 56;					
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;							
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Db	1	TCTAACCCCTAACTGAGAAGGCGGTAG 26					
RESULT 76							
E36507							
LOCUS		E36507	26 bp	DNA	linear	PAT 18-JUN-2001	
DEFINITION		Method for detecting bladder cancer in urine samples.					
ACCESSION		E36507					
VERSION		E36507.1 GI:13022704					
KEYWORDS		JP 1999243995-A/1.					
SOURCE		synthetic construct					
ORGANISM		other sequences; artificial sequences.					
REFERENCE		1 (bases 1 to 26)					
AUTHORS		Thomas,E.					
TITLE		Method for detecting bladder cancer in urine samples					
JOURNAL		Patent: JP 1999243995-A 1 14-SEP-1999;					
COMMENT		ROCHE DIAGNOSTICS GMBH					
FEATURES		Location/Qualifiers					
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Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;							
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Db	1	TCTAACCCCTAACTGAGAAGGCGGTAG 26					
RESULT 76							
E36507							
LOCUS		E36507	26 bp	DNA	linear	PAT 18-JUN-2001	
DEFINITION		Method for detecting bladder cancer in urine samples.					
ACCESSION		E36507					
VERSION		E36507.1 GI:13022704					
KEYWORDS		JP 1999243995-A/1.					
SOURCE		synthetic construct					
ORGANISM		other sequences; artificial sequences.					
REFERENCE		1 (bases 1 to 26)					
AUTHORS		Thomas,E.					
TITLE		Method for detecting bladder cancer in urine samples					
JOURNAL		Patent: JP 1999243995-A 1 14-SEP-1999;					
COMMENT		ROCHE DIAGNOSTICS GMBH					
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Best Local Similarity		100.0%; Pred. No. 56;					
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;							
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Db	1	TCTAACCCCTAACTGAGAAGGCGGTAG 26					
RESULT 76							
E36507							
LOCUS		E36507	26 bp	DNA	linear	PAT 18-JUN-2001	
DEFINITION		Method for detecting bladder cancer in urine samples.					
ACCESSION		E36507					
VERSION		E36507.1 GI:13022704					
KEYWORDS		JP 1999243995-A/1.					
SOURCE		synthetic construct					
ORGANISM		other sequences; artificial sequences.					
REFERENCE		1 (bases 1 to 26)					
AUTHORS		Thomas,E.					
TITLE		Method for detecting bladder cancer in urine samples					
JOURNAL		Patent: JP 1999243995-A 1 14-SEP-1999;					
COMMENT		ROCHE DIAGNOSTICS GMBH					
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Best Local Similarity		100.0%; Pred. No. 56;					
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;							
QY	45	TCTAACCCCTAACTGAGAAGGCGGTAG 70					
Db	1	TCTAACCCCTAACTGAGAAGGCGGTAG 26					
RESULT 76							
E36507							
LOCUS		E36507	26 bp	DNA	linear	PAT 18-JUN-2001	
DEFINITION		Method for detecting bladder cancer in urine samples.					
ACCESSION		E36507					
VERSION		E36507.1 GI:13022704					
KEYWORDS		JP 1999243995-A/1.					
SOURCE		synthetic construct					
ORGANISM		other sequences; artificial sequences.					
REFERENCE		1 (bases 1 to 26)					
AUTHORS		Thomas,E.					
TITLE		Method for detecting bladder cancer in urine samples					
JOURNAL		Patent: JP 1999243995-A 1 14-SEP-1999;					
COMMENT		ROCHE DIAGNOSTICS GMBH					
FEATURES		Location/Qualifiers					
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DEFINITION		Method for detecting bladder cancer in urine samples.					
ACCESSION		E36507					
VERSION		E36507.1 GI:13022704					
KEYWORDS		JP 1999243995-A/1.					
SOURCE		synthetic construct					
ORGANISM		other sequences; artificial sequences.					
REFERENCE		1 (bases 1 to 26)					
AUTHORS		Thomas,E.					
TITLE		Method for detecting bladder cancer in urine samples					
JOURNAL		Patent: JP 1999243995-A 1 14-SEP-1999;					
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Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;							
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Db	1	TCTAACCCCTAACTGAGAAGGCGGTAG 26					
RESULT 76							
E36507							
LOCUS		E36507	26 bp	DNA	linear	PAT 18-JUN-2001	
DEFINITION		Method for detecting bladder cancer in urine samples.					
ACCESSION		E36507					
VERSION		E36507.1 GI:13022704					
KEYWORDS		JP 1999243995-A/1.					
SOURCE							

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PD 14-SEP-1999
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PR 22-DEC-1997 DE 19757300:2
PI THOMAS ENRIHI
PC C12Q1/68//C12N1/00
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Qy 54 AACTGAGAGGCGTAGCGCGGTGC 79
Db 1 AACTGAGAGGCGTAGCGCGGTGC 26

RESULT 77
E36508/c
LOCUS
DEFINITION Method for detecting bladder cancer in urine samples. PAT 18-JUN-2001
ACCESSION E36508
VERSION E36508.1 GI:13022705
KEYWORDS JP 1999243995-A/2.
SOURCE synthetic construct
ORGANISM other sequences; artificial sequences.
REFERENCE 1 (bases 1 to 26)
AUTHORS Thomas, E.
TITLE Method for detecting bladder cancer in urine samples
JOURNAL Patent: JP 1999243995-A 2 14-SEP-1999;
COMMENT ROCHE DIAGNOSTICS GMBH
OS Artificial Sequence
PN JP 1999243995-A/2
PD 14-SEP-1999
PF 22-DEC-1998 JP 1998365689
PR 22-DEC-1997 DE 19757300:2
PI THOMAS ENRIHI
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Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 145 CTTCCACCGTTCATTCTAGAGCAAC 170
Db 26 CTTCCACCGTTCATTCTAGAGCAAC 1

RESULT 78
E37045
LOCUS
DEFINITION Human telomerase catalytic subunit promoter. PAT 18-JUN-2001
ACCESSION E37045
VERSION E37045.1 GI:13023008
KEYWORDS JP 1999253177-A/253.
SOURCE unidentified

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ORGANISM unidentified
REFERENCE 1 (bases 1 to 26)
AUTHORS Thomas, R.S., Jochimu, R., Toru, N., Karen, B.C., Greg, B.M., Calvin, B.H. and William, H.A.
TITLE Human telomerase catalytic subunit promoter
JOURNAL Patent: JP 1999253177-A 253 21-SEP-1999;
COMMENT JERON CORP, UNIVERSITY TECHNOLOGY CORP
OS Unidentified
PN JP 1999253177-A/253
PD 21-SEP-1999
PF 15-OCT-1998 JP 1998320169
PR 01-OCT-1996 US 08/724,643, 18-APR-1997 US 08/844,419, PR 25-APR-1997 US 08/846,017, 06-MAY-1997 US 08/851,843, PR 09-MAY-1997 US 08/854,050, 14-AUG-1997 US 08/911,312, PR 14-AUG-1997 US 08/912,951, 14-AUG-1997 US 08/915,503 PI THOMAS R SECHI, JOCHIMU RINGNER, TORU NAKAMURA, KAREN B CHAPMAN, PI GREG B MORIN.
PI CALVIN B HAREI, WILLIAM H ANDREWS
PC C12N15/09, A61K31/70, A61K38/55, A61K39/395, A61K39/395, A61K48/00, PC C12Q1/02,
PC C12Q1/48, C12Q1/68, G01N33/15, G01N33/48, G01N33/50//C07K14/47, PC C07K16/40.
PC C12N1/19, C12N1/21, C12N5/10, C12N9/12, C12P21/08, (C12N1/19, PC C12R1:84),
PC (C12N1/21, C12R1:19), (C12N9/12, C12R1:19), (C12N9/12, C12R1:84), PC (C12N9/12, C12R1:91), C12N15/00, A61K37/64, C12N5/00 CC
Strandedness: Single;
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Qy 45 TCTAACCCCTAACTGAGAGGCGGTAG 70
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RESULT 79
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LOCUS
DEFINITION Human telomerase catalytic subunit promoter. PAT 18-JUN-2001
ACCESSION E37046
VERSION E37046.1 GI:13023009
KEYWORDS JP 1999253177-A/254.
SOURCE unidentified
ORGANISM unidentified
REFERENCE 1 (bases 1 to 26)
AUTHORS Thomas, R.S., Jochimu, R., Toru, N., Karen, B.C., Greg, B.M., Calvin, B.H. and William, H.A.
TITLE Human telomerase catalytic subunit promoter
JOURNAL Patent: JP 1999253177-A 254 21-SEP-1999;
COMMENT JERON CORP, UNIVERSITY TECHNOLOGY CORP
OS Unidentified
PN JP 1999253177-A/254
PD 21-SEP-1999
PF 15-OCT-1998 JP 1998320169
PR 01-OCT-1996 US 08/724,643, 18-APR-1997 US 08/844,419, PR 25-APR-1997 US 08/846,017, 06-MAY-1997 US 08/851,843, PR 09-MAY-1997 US 08/854,050, 14-AUG-1997 US 08/911,312, PR 14-AUG-1997 US 08/912,951, 14-AUG-1997 US 08/915,503 PI THOMAS R SECHI, JOCHIMU RINGNER, TORU NAKAMURA, KAREN B CHAPMAN, PI GREG B MORIN.

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PI CALVIN B HAREL, WILLIAM H ANDREWS  
PC C12N15/09, A61K31/70, A61K38/55, A61K39/395, A61K39/395, A61K48/00,  
PC C12Q1/02, A61K31/70, A61K38/55, A61K39/395, A61K39/395, A61K48/00,  
PC C12Q1/48, C12Q1/68, G01N33/15, G01N33/48, G01N33/50, C07K14/47, PC  
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PC C12N1/19, C12N1/21, C12N5/10, C12N9/12, C12P21/08, (C12N1/19, PC  
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PC (C12N1/21, C12R1:19), (C12N9/12, C12R1:19), (C12N9/12, C12R1:84),  
PC (C12N9/12, C12R1:91), C12N15/00, A61K37/64, C12N5/00 CC  
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Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 145 CTTCCACCGTTCATCTAGAGCAAC 170  
Db 26 CTTCCACCGTTCATCTAGAGCAAC 1

RESULT 80  
I31770/c

LOCUS I31770 26 bp DNA linear PAT 06-FEB-1997  
DEFINITION Sequence 23 from patent US 5583016.  
ACCESSION I31770  
VERSION I31770.1 GI:1822561  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unknown.

REFERENCE 1 (bases 1 to 26)  
AUTHORS Villeponteau, B., Feng, J., Funk, W. and Andrews, W.H.  
TITLE Mammalian telomerase  
JOURNAL Patent: US 5583016-A 23 10-DEC-1996;  
FEATURES Location/Qualifiers  
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Best Local Similarity 100.0%; Pred. No. 56;  
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 145 CTTCCACCGTTCATCTAGAGCAAC 170  
Db 26 CTTCCACCGTTCATCTAGAGCAAC 1

RESULT 81  
AR243518

LOCUS AR243518 26 bp DNA linear PAT 20-DEC-2002  
DEFINITION Sequence 311 from patent US 6475789.  
ACCESSION AR243518  
VERSION AR243518.1 GI:27290729  
KEYWORDS  
SOURCE Unknown.

REFERENCE 1 (bases 1 to 26)  
AUTHORS Cech, T.R., Lingner, J., Nakamura, T., Chapman, K.B., Morin, G.B.,  
Harley, C.B. and Andrews, W.H.  
TITLE Human telomerase catalytic subunit: diagnostic and therapeutic  
methods  
JOURNAL Patent: US 6475789-A 311 05-NOV-2002;

FEATURES  
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Query Match 5.8%; Score 26; DB 1; Length 26;  
Best Local Similarity 100.0%; Pred. No. 56;  
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 45 TCTAACCCCTAACTGAGAGGGCGTAG 70  
Db 1 TCTAACCCCTAACTGAGAGGGCGTAG 26

RESULT 82  
AR243519/c

LOCUS AR243519 26 bp DNA linear PAT 20-DEC-2002  
DEFINITION Sequence 312 from patent US 6475789.  
ACCESSION AR243519  
VERSION AR243519.1 GI:27290730  
KEYWORDS  
SOURCE Unknown.

Query Match 5.8%; Score 26; DB 1; Length 26;  
Best Local Similarity 100.0%; Pred. No. 56;  
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 145 CTTCCACCGTTCATCTAGAGCAAC 170  
Db 26 CTTCCACCGTTCATCTAGAGCAAC 1

RESULT 83  
AR306473/c

LOCUS AR306473 26 bp DNA linear PAT 12-JUN-2003  
DEFINITION Sequence 23 from patent US 6548298.  
ACCESSION AR306473  
VERSION AR306473.1 GI:31696312  
KEYWORDS  
SOURCE Unknown.

Query Match 5.8%; Score 26; DB 1; Length 26;  
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QY 145 CTTCCACCGTTCATCTAGAGCAAC 170  
Db 26 CTTCCACCGTTCATCTAGAGCAAC 1

RESULT 84

LOCUS AR306473 26 bp DNA linear PAT 12-JUN-2003  
DEFINITION Sequence 23 from patent US 6548298.  
ACCESSION AR306473  
VERSION AR306473.1 GI:31696312  
KEYWORDS  
SOURCE Unknown.

Query Match 5.8%; Score 26; DB 1; Length 26;  
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Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 145 CTTCCACCGTTCATCTAGAGCAAC 170  
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RESULT 84

LOCUS AR306473 26 bp DNA linear PAT 12-JUN-2003  
DEFINITION Sequence 23 from patent US 6548298.  
ACCESSION AR306473  
VERSION AR306473.1 GI:31696312  
KEYWORDS  
SOURCE Unknown.

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QY 145 CTTCCACCGTTCATCTAGAGCAAC 170  
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RESULT 84

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KEYWORDS  
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Query Match 5.8%; Score 26; DB 1; Length 26;  
Best Local Similarity 100.0%; Pred. No. 56;  
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AR306480
LOCUS AR306480 26 bp DNA linear PAT 12-JUN-2003
DEFINITION Sequence 30 from patent US 6548298.
ACCESSION AR306480
VERSION AR306480.1 GI:31696319
KEYWORDS Unknown.
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 26)
AUTHORS Villeponteau,B., Feng,J., Funk,W. and Andrews,W.H.
TITLE Mammalian telomerase
JOURNAL Patent: US 6548298-A 30 15-APR-2003;
FEATURES Location/Qualifiers
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Query Match 5.8%; Score 26; DB 1; Length 26;
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Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 45 TCTAACCCCTAACTGAGAGGGCGTAG 70
Db 1 TCTAACCCCTAACTGAGAGGGCGTAG 26

RESULT 85
AR369722
LOCUS AR369722 26 bp DNA linear PAT 12-SEP-2003
DEFINITION Sequence 25 from patent US 6300110.
ACCESSION AR369722
VERSION AR369722.1 GI:34606061
KEYWORDS Unknown.
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 26)
AUTHORS Villeponteau,B., Feng,J., Andrews,W.H. and Adams,R.R.
TITLE Peptides related to TPC2 and TPC3, two proteins that are
coexpressed with telomerase activity
JOURNAL Patent: US 6300110-A 25 09-OCT-2001;
FEATURES Location/Qualifiers
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Query Match 5.8%; Score 26; DB 1; Length 26;
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Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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RESULT 86
AR369723/c
LOCUS AR369723 26 bp DNA linear PAT 12-SEP-2003
DEFINITION Sequence 26 from patent US 6300110.
ACCESSION AR369723
VERSION AR369723.1 GI:34606063
KEYWORDS Unknown.
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 26)
AUTHORS Villeponteau,B., Feng,J., Andrews,W.H. and Adams,R.R.
TITLE Peptides related to TPC2 and TPC3, two proteins that are
coexpressed with telomerase activity
JOURNAL Patent: US 6300110-A 26 09-OCT-2001;
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Db 26 CTTCCACCGTTTCATTCTAGAGCAAC 1

RESULT 87
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LOCUS AR370169 26 bp DNA linear PAT 12-SEP-2003
DEFINITION Sequence 4 from patent US 6300131.
ACCESSION AR370169
VERSION AR370169.1 GI:34606664
KEYWORDS Unknown.
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 26)
AUTHORS Greider,C.W. and Le,S.
TITLE Telomerase-associated proteins
JOURNAL Patent: US 6300131-A 4 09-OCT-2001;
FEATURES Location/Qualifiers
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/mol_type="genomic DNA"

Query Match 5.8%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred.No. 56;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 145 CTTCCACCGTTTCATTCTAGAGCAAC 170
Db 26 CTTCCACCGTTTCATTCTAGAGCAAC 1

RESULT 88
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LOCUS AR381129 26 bp DNA linear PAT 18-DEC-2003
DEFINITION Sequence 4 from patent US 6607898.
ACCESSION AR381129
VERSION AR381129.1 GI:40088890
KEYWORDS Unknown.
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 26)
AUTHORS Kopraski,M.S. and Gocke,C.D.
TITLE Method for detection of hTR and hTERT telomerase-associated RNA in
plasma or serum
JOURNAL Patent: US 6607898-A 4 19-AUG-2003;
FEATURES Location/Qualifiers
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Best Local Similarity 100.0%; Pred.No. 56;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 45 TCTAACCCCTAACTGAGAGGGCGTAG 70
Db 1 TCTAACCCCTAACTGAGAGGGCGTAG 26

RESULT 89
AR381130/c
LOCUS AR381130 26 bp DNA linear PAT 18-DEC-2003
DEFINITION Sequence 5 from patent US 6607898.
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ACCESSION AR381130  
VERSION AR381130.1 GI:40088891  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unclassified.  
REFERENCE 1 (bases 1 to 26)  
AUTHORS Koprski, M.S. and Gocke, C.D.  
TITLE Method for detection of hTR and hTERT telomerase-associated RNA in plasma or serum  
JOURNAL Patent: US 6607898-A 5 19-AUG-2003;  
FEATURES Location/Qualifiers  
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/mol\_type="genomic DNA"

Query Match 5.8%; Score 26; DB 1; Length 26;  
Best Local Similarity 100.0%; Pred. No. 56;  
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 145 CTTCCACCGTTCATTCTAGAGCAAC 170  
Db 26 CTTCCACCGTTCATTCTAGAGCAAC 1

RESULT 90  
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LOCUS AR390720 26 bp DNA linear PAT 18-DEC-2003  
DEFINITION Sequence 597 from patent US 6610839.  
ACCESSION AR390720  
VERSION AR390720.1 GI:40112654  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unclassified.  
REFERENCE 1 (bases 1 to 26)  
AUTHORS Morin, G.B. and Andrews, W.H.  
TITLE Promoter for telomerase reverse transcriptase  
JOURNAL Patent: US 6610839-A 597 26-AUG-2003;  
FEATURES Location/Qualifiers  
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Query Match 5.8%; Score 26; DB 1; Length 26;  
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Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 45 TCTAACCCCTAACTGAGAGGCGGTAG 70  
Db 1 TCTAACCCCTAACTGAGAGGCGGTAG 26

RESULT 91  
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LOCUS AR390721 26 bp DNA linear PAT 18-DEC-2003  
DEFINITION Sequence 598 from patent US 6610839.  
ACCESSION AR390721  
VERSION AR390721.1 GI:40112656  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unclassified.  
REFERENCE 1 (bases 1 to 26)  
AUTHORS Morin, G.B. and Andrews, W.H.  
TITLE Promoter for telomerase reverse transcriptase  
JOURNAL Patent: US 6610839-A 598 26-AUG-2003;  
FEATURES Location/Qualifiers  
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Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Best Local Similarity 100.0%; Pred. No. 56;  
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 145 CTTCCACCGTTCATTCTAGAGCAAC 170  
Db 26 CTTCCACCGTTCATTCTAGAGCAAC 1

RESULT 92  
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LOCUS AR393334 26 bp DNA linear PAT 18-DEC-2003  
DEFINITION Sequence 597 from patent US 6617110.  
ACCESSION AR393334  
VERSION AR393334.1 GI:40118738  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unclassified.  
REFERENCE 1 (bases 1 to 26)  
AUTHORS Cech, T.R., Lingner, J., Nakamura, T., Chapman, K.B., Morin, G.B., Harley, C.B. and Andrews, W.H.  
TITLE Cells immortalized with telomerase reverse transcriptase for use in drug screening  
JOURNAL Patent: US 6617110-A 597 09-SEP-2003;  
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Db 1 TCTAACCCCTAACTGAGAGGCGGTAG 26

RESULT 93  
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DEFINITION Sequence 598 from patent US 6617110.  
ACCESSION AR393335  
VERSION AR393335.1 GI:40118740  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unclassified.  
REFERENCE 1 (bases 1 to 26)  
AUTHORS Cech, T.R., Lingner, J., Nakamura, T., Chapman, K.B., Morin, G.B., Harley, C.B. and Andrews, W.H.  
TITLE Cells immortalized with telomerase reverse transcriptase for use in drug screening  
JOURNAL Patent: US 6617110-A 598 09-SEP-2003;  
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QY 145 CTTCCACCGTTCATTCTAGAGCAAC 170  
Db 26 CTTCCACCGTTCATTCTAGAGCAAC 1

RESULT 94  
AX022186  
LOCUS AX022186 26 bp DNA linear PAT 07-SEP-2000  
DEFINITION Sequence 25 from Patent EP0953042.  
ACCESSION AX022186

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VERSION AX022186.1 GI:10045854
KEYWORDS
SOURCE
ORGANISM
REFERENCE
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AUTHORS Andrews, W.H., Villeponteau, B., Adams, R.R. and Peng, J.
TITLE Methods and reagents for regulating telomere length and telomerase activity
JOURNAL Patent: EP 0953042-A 25 03-NOV-1999; GERON CORP (US)
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Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 45 TCTAACCCCTAACTGAGAAGGCGGTAG 70
Db 1 TCTAACCCCTAACTGAGAAGGCGGTAG 26

RESULT 95
AX022187/c
LOCUS AX022187 26 bp DNA linear PAT 07-SEP-2000
DEFINITION Sequence 26 from Patent EP0953042.
ACCESSION AX022187
VERSION AX022187.1 GI:10045855
KEYWORDS
SOURCE
ORGANISM
REFERENCE
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AUTHORS Andrews, W.H., Villeponteau, B., Adams, R.R. and Peng, J.
TITLE Methods and reagents for regulating telomere length and telomerase activity
JOURNAL Patent: EP 0953042-A 26 03-NOV-1999; GERON CORP (US)
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Query Match 5.8%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 56;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 145 CTTCCACCGTTCATTCTAGAGCAAC 170
Db 26 CTTCCACCGTTCATTCTAGAGCAAC 1

RESULT 96
AX033376
LOCUS AX033376 26 bp DNA linear PAT 21-SEP-2000
DEFINITION Sequence 8 from Patent WO0046601.
ACCESSION AX033376
VERSION AX033376.1 GI:10280150
KEYWORDS
SOURCE
ORGANISM
REFERENCE
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AUTHORS Larsen, F. and Skaanseng, M.
TITLE Detecting telomerase activity
JOURNAL Patent: WO 0046601-A 8 10-AUG-2000; LARSEN FRANK (NO); SKAANSENG MARIANNE (NO)
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Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 145 CTTCCACCGTTCATTCTAGAGCAAC 170
Db 26 CTTCCACCGTTCATTCTAGAGCAAC 1

RESULT 97
AX033377/c
LOCUS AX033377 26 bp DNA linear PAT 21-SEP-2000
DEFINITION Sequence 9 from Patent WO0046601.
ACCESSION AX033377
VERSION AX033377.1 GI:10280151
KEYWORDS
SOURCE
ORGANISM
REFERENCE
  1
AUTHORS Larsen, F. and Skaanseng, M.
TITLE Detecting telomerase activity
JOURNAL Patent: WO 0046601-A 9 10-AUG-2000; LARSEN FRANK (NO); SKAANSENG MARIANNE (NO)
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    /organism="synthetic construct"
    /mol_type="unassigned DNA"
    /db_xref="taxon:32630"
    /note="PCR primer"

Query Match 5.8%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 56;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 45 TCTAACCCCTAACTGAGAAGGCGGTAG 70
Db 1 TCTAACCCCTAACTGAGAAGGCGGTAG 26

RESULT 98
AX317988
LOCUS AX317988 26 bp DNA linear PAT 14-DEC-2001
DEFINITION Sequence 1 from Patent WO0190409.
ACCESSION AX317988
VERSION AX317988.1 GI:17900797
KEYWORDS
SOURCE
ORGANISM
REFERENCE
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AUTHORS Chen, X.Q. and Anker, P.
TITLE Cancer diagnosis method
JOURNAL Patent: WO 0190409-A 1 29-NOV-2001; Chen, Xu Qi (US); Stroun, Maurice (CH); Anker, Philippe (CH)
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Query Match 5.8%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 56;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 60 GAGGGCGGTAGGCGCGTCTTTTGC 85
Db 1 GAGGGCGGTAGGCGCGTCTTTTGC 85
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Db      1 GAAGGGCTAGGCGCGTCTTTGC 26

RESULT 99
AX468454
LOCUS      26 bp      DNA      linear      PAT 16-JUL-2002
DEFINITION Sequence 4 from Patent WO0218652.
ACCESSION AX468454
VERSION    AX468454.1 GI:21901290
KEYWORDS
SOURCE     Homo sapiens (human)
ORGANISM   Homo sapiens
            Eukaryota; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE 1
AUTHORS    Kopreski,M.S. and Gocke,C.D.
TITLE      Method for detection of htr and htert telomerase-associated rna in
            plasma or serum
JOURNAL    Patent: WO 0218652-A 4 07-MAR-2002;
            Oncomedx, Inc. (US)
FEATURES   source
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            /organism="Homo sapiens"
            /mol_type="unassigned DNA"
            /db_xref="taxon:9606"

Query Match      5.8%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 56;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      45 TCTAACCCCTAACTGAGAGGGCGGTAG 70
          |||||
Db      1 TCTAACCCCTAACTGAGAGGGCGGTAG 26

RESULT 100
AX468455/c
LOCUS      26 bp      DNA      linear      PAT 16-JUL-2002
DEFINITION Sequence 5 from Patent WO0218652.
ACCESSION AX468455
VERSION    AX468455.1 GI:21901291
KEYWORDS
SOURCE     Homo sapiens (human)
ORGANISM   Homo sapiens
            Eukaryota; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE 1
AUTHORS    Kopreski,M.S. and Gocke,C.D.
TITLE      Method for detection of htr and htert telomerase-associated rna in
            plasma or serum
JOURNAL    Patent: WO 0218652-A 5 07-MAR-2002;
            Oncomedx, Inc. (US)
FEATURES   source
            Location/Qualifiers
            1..26
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            /mol_type="unassigned DNA"
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Query Match      5.8%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 56;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      45 TCTAACCCCTAACTGAGAGGGCGGTAG 70
          |||||
Db      1 TCTAACCCCTAACTGAGAGGGCGGTAG 26

RESULT 101
AX810634
LOCUS      26 bp      DNA      linear      PAT 25-NOV-2003
DEFINITION Sequence 599 from Patent EP1333094.
ACCESSION AX810634
VERSION    AX810634.1 GI:38524119
KEYWORDS
SOURCE     Unidentified
ORGANISM   OS

KEYWORDS   .
SOURCE     unidentified
ORGANISM   unidentified
REFERENCE 1
AUTHORS    Cech,T.R., Lingner,J., Nakamura,T., Chapman,K.B., Morin,G.B.,
            Harley,C.B. and Andrews,W.H.
TITLE      Human telomerase catalytic subunit
JOURNAL    Patent: EP 1333094-A 599 06-AUG-2003;
            Geron Corporation (US); University Technology Corporation (US)
FEATURES   source
            Location/Qualifiers
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            /mol_type="unassigned DNA"
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Query Match      5.8%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 56;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      45 TCTAACCCCTAACTGAGAGGGCGGTAG 70
          |||||
Db      1 TCTAACCCCTAACTGAGAGGGCGGTAG 26

RESULT 102
AX810635/c
LOCUS      26 bp      DNA      linear      PAT 25-NOV-2003
DEFINITION Sequence 600 from Patent EP1333094.
ACCESSION AX810635
VERSION    AX810635.1 GI:38524120
KEYWORDS
SOURCE     unidentified
ORGANISM   unidentified
REFERENCE 1
AUTHORS    Cech,T.R., Lingner,J., Nakamura,T., Chapman,K.B., Morin,G.B.,
            Harley,C.B. and Andrews,W.H.
TITLE      Human telomerase catalytic subunit
JOURNAL    Patent: EP 1333094-A 600 06-AUG-2003;
            Geron Corporation (US); University Technology Corporation (US)
FEATURES   source
            Location/Qualifiers
            1..26
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            /mol_type="unassigned DNA"
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Query Match      5.8%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 56;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      145 CTTCCACCGTTTCATTCTAGAGCAAC 170
          |||||
Db      26 CTTCCACCGTTTCATTCTAGAGCAAC 1

RESULT 103
BD011296
LOCUS      26 bp      DNA      linear      PAT 31-JAN-2002
DEFINITION Human telomerase catalytic subunit.
ACCESSION BD011296
VERSION    BD011296.1 GI:18639669
KEYWORDS   JP 2001081042-A/253.
SOURCE     unidentified
ORGANISM   unclassified
REFERENCE 1 (bases 1 to 26)
AUTHORS    Sechi,T.N., Lingner,J., Nakamura,T., Chapman,K.B., Mori,G.B.,
            Harley,C.B. and Andrews,W.H.
TITLE      Human telomerase catalytic subunit
JOURNAL    Patent: JP 2001081042-A 253 27-MAR-2001;
            GERON CORP, UNIVERSITY TECHNOLOGY CORP
COMMENT    OS Unidentified
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PN JP 2001081042-A/253
PD 27-MAR-2001
PF 27-JUL-2000 JP 2000227474
PR 01-OCT-1996 US 08/724643,18-APR-1997 US 08/844419 PR
25-APR-1997 US 08/846017,06-MAY-1997 US 08/851843 PR
09-MAY-1997 US 08/854050,14-AUG-1997 US 08/911312 PR
14-AUG-1997 US 08/912951,14-AUG-1997 US 08/915503 PI THOMAS
R SECHI, JOACHIM LINGNER, TORU NAKAMURA, KAREN B CHAPMAN, PI GREG B
MORIN,
PI CALVIN B HARLEY, WILLIAM H ANDREWS
PC A61K38/00,A61K31/7088,A61K39/00,A61K48/00,A61P35/00,A61P43/00,
PC C07K5/10,
PC C07K5/107,C07K5/117,C07K7/06,C07K7/08,C07K16/40,C12N9/12, PC
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PC C12Q1/02,C12Q1/48,C12Q1/68,G01N33/15,G01N33/50,G01N33/53, PC
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CC Topology: Linear;
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        Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 45 TCTAACCTTACTGAGAGGCGTAG 70
Db 1 TCTAACCTTACTGAGAGGCGTAG 26

RESULT 104
BD011297/c
LOCUS Human telomerase catalytic subunit.
DEFINITION
ACCESSION BD011297.1 GI:18639670
VERSION JP 2001081042-A/254.
KEYWORDS
SOURCE unclassified
ORGANISM unclassified.
REFERENCE 1 (bases 1 to 26)
AUTHORS Sechi,T.R., Lingner,J., Nakamura,T., Chapman,K.B., Mori,G.B.,
TITLE Human telomerase catalytic subunit
JOURNAL Patent: JP 2001081042-A 254 27-MAR-2001;
GERON CORP, UNIVERSITY TECHNOLOGY CORP
COMMENT OS Unidentified
PN JP 2001081042-A/254
PD 27-MAR-2001
PF 27-JUL-2000 JP 2000227474
PR 01-OCT-1996 US 08/724643,18-APR-1997 US 08/844419 PR
25-APR-1997 US 08/846017,06-MAY-1997 US 08/851843 PR
09-MAY-1997 US 08/854050,14-AUG-1997 US 08/911312 PR
14-AUG-1997 US 08/912951,14-AUG-1997 US 08/915503 PI THOMAS
R SECHI, JOACHIM LINGNER, TORU NAKAMURA, KAREN B CHAPMAN, PI GREG B
MORIN,
PI CALVIN B HARLEY, WILLIAM H ANDREWS
PC A61K38/00,A61K31/7088,A61K39/00,A61K48/00,A61P35/00,A61P43/00,
PC C07K5/10,
PC C07K5/107,C07K5/117,C07K7/06,C07K7/08,C07K16/40,C12N9/12, PC
C12N15/09,
PC C12Q1/02,C12Q1/48,C12Q1/68,G01N33/15,G01N33/50,G01N33/53, PC
G01N33/53,
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Strandedness: Single;
CC Topology: Linear;

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        Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 145 CTTCACCGTTCATTCTAGAGCAAC 170
Db 26 CTTCACCGTTCATTCTAGAGCAAC 1

RESULT 105
BD023721
LOCUS Method for detecting and inhibiting RNA component of telomerase.
DEFINITION
ACCESSION BD023721
VERSION BD023721.1 GI:22564944
KEYWORDS JP 2001507229-A/25.
SOURCE unclassified
ORGANISM unclassified.
REFERENCE 1 (bases 1 to 26)
AUTHORS Kim,N.W., Wu,F., Kealey,J.T., Pruzan,R. and Weinrich,S.L.
TITLE Method for detecting and inhibiting RNA component of telomerase
JOURNAL Patent: JP 2001507229-A 25 05-JUN-2001;
GERON CORP
COMMENT PN JP 2001507229-A/25
PD 05-JUN-2001
PF 19-DEC-1997 JP 1998529003
PR 20-DEC-1996 US 08/770564,20-DEC-1996 US 08/770565 PI
NAM WOO KIM,FRED WU,JAMES T KEALEY,RONALD PRUZAN,SCOTT L PI
WEINRICH
PC C12N15/09,A61K9/08,A61K31/7105,A61K45/00,A61K48/00,A61P35/00,
PC C12N5/10,
PC C12N9/12,C12Q1/68,C12Q1/68,C12N15/00,C12N5/00 CC
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CC Topology: Linear;
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        Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 60 GAAGGGCGTAGGGCGCGTCTTTTGC 85
Db 1 GAAGGGCGTAGGGCGCGTCTTTTGC 26

RESULT 106
BD131325
LOCUS Telomerase assay of bodily fluid for cancer screening and
DEFINITION evaluation of disease phase and prognosis.
ACCESSION BD131325
VERSION BD131325.1 GI:23226270
KEYWORDS JP 2002503480-A/3.
SOURCE synthetic construct
ORGANISM synthetic construct
REFERENCE 1 (bases 1 to 26)

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AUTHORS Strovel,J.W., Stamberg,J., Highsmith,E. and Abruzzo,L.V.  
 TITLE Telomerase assay of bodily fluid for cancer screening and evaluation of disease phase and prognosis  
 JOURNAL Patent: JP 2002503480-A 3 05-FEB-2002;  
 UNIVERSITY OF MARYLAND BALTIMORE  
 COMMENT OS Artificial Sequence  
 PN JP 2002503480-A/3  
 PD 05-FEB-2002  
 PF 16-FEB-1999 JP 2000531587  
 PR 16-FEB-1998 US 60/074793  
 PI JEFFREY W STROVEL, JUDITH STAMBERG, EDWARD HIGHSMITH, LYNNE V PI ABRUZZO  
 PC C12Q1/68, C12N15/09, C12P19/34, C12N15/00  
 CC Description of Artificial Sequence: F3b, synthesized, Gibco-BRL  
 FH Key Location/Qualifiers  
 FT source 1..26 /organism='Artificial Sequence'.  
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 Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 45 TCTAACCCCTAACTGAGAGGGCGTAG 70  
 DB 1 TCTAACCCCTAACTGAGAGGGCGTAG 26  
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 BD225817/c  
 LOCUS Promoter region of mouse and human telomerase RNA component genes.  
 DEFINITION BD225817  
 ACCESSION BD225817  
 VERSION BD225817.1 GI:33035587  
 KEYWORDS JP 2002509699-A/20.  
 SOURCE synthetic construct  
 ORGANISM other sequences; artificial sequences.  
 REFERENCE 1 (bases 1 to 25)  
 AUTHORS Keith,W.N.  
 TITLE Promoter region of mouse and human telomerase RNA component genes  
 JOURNAL Patent: JP 2002509699-A 20 02-APR-2002;  
 CANCER RESEARCH CAMPAIGN TECHNOLOGY LTD  
 COMMENT OS Artificial Sequence  
 PN JP 2002509699-A/20  
 PD 02-APR-2002  
 PF 29-JAN-1999 JP 2000529424  
 PR 29-JAN-1998 GB 9801902.9  
 PI WILLIAM NICOL KEITH  
 PC C12N15/09, A61K31/7105, A61K31/711, A61K35/76, A61K38/00, A61K45/00, PC A61K48/00,  
 A61P35/00, C12N1/15, C12N1/19, C12N1/21, C12N5/10, C12P21/02 PC C12Q1/68/C12N9/12,  
 PC (A61K35/76, A61K31:522), C12N15/00, A61K37/02, C12N5/00 CC Description of Artificial Sequence: Primer  
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 /db\_xref='taxon:32630'  
 Query Match 5.5%; Score 25; DB 1; Length 25;  
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 Matches 25; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 175 AATGTCAGCTGCTGGCCGCTGC 199  
 DB 25 AATGTCAGCTGCTGGCCGCTGC 1  
 RESULT 108  
 AX019566/c  
 LOCUS AX019566 25 bp DNA linear PAT 07-SEP-2000  
 DEFINITION Sequence 20 from Patent WO938964.  
 ACCESSION AX019566  
 VERSION AX019566.1 GI:10043480  
 KEYWORDS .  
 SOURCE synthetic construct  
 ORGANISM other sequences; artificial sequences.  
 REFERENCE 1  
 AUTHORS Keith,W.N.  
 TITLE Promoter regions of the mouse and human telomerase rna component genes  
 JOURNAL Patent: WO 938964-A 20 05-AUG-1999;  
 KEITH WILLIAM NICOL (GB); CANCER RES CAMPAIGN TECH (GB)  
 FEATURES source  
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 /db\_xref='taxon:32630'  
 /note='primer'  
 Query Match 5.5%; Score 25; DB 1; Length 25;  
 Best Local Similarity 100.0%; Pred. No. 63;  
 Matches 25; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 175 AATGTCAGCTGCTGGCCGCTGC 199  
 DB 25 AATGTCAGCTGCTGGCCGCTGC 1  
 RESULT 109  
 BD071073  
 LOCUS Modulation of mammalian telomerase by peptide nucleic acids.  
 DEFINITION BD071073  
 ACCESSION BD071073  
 VERSION BD071073.1 GI:22616676  
 KEYWORDS JP 2001517929-A/39.  
 SOURCE unidentified  
 ORGANISM unidentified  
 REFERENCE 1 (bases 1 to 25)  
 AUTHORS Shay,J.W., Wright,W.E., Piatyszek,M.A., Corey,D. and Norton,J.C.  
 TITLE Modulation of mammalian telomerase by peptide nucleic acids  
 JOURNAL Patent: JP 2001517929-A 39 09-OCT-2001;  
 GERON CORP  
 COMMENT OS Unidentified  
 PN JP 2001517929-A/39  
 PD 09-OCT-2001  
 PF 09-APR-1997 JP 1997536487  
 PR 09-APR-1996 US 08/630019  
 PI JERRY W SHAY, WOODRING E WRIGHT, MIECZYSLAW A PIATYSZEK, DAVID COREY,  
 PI JAMES C NORTON  
 PC C07K14/00, A61K38/16, C12Q1/68  
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 CC Topology: Linear;  
 CC Modulation of mammalian telomerase by peptide nucleic acids FH  
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Query Match 5.5%; Score 25; DB 1; Length 25;  
Best Local Similarity 100.0%; Pred. No. 63;  
Matches 25; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 41 TTTGCTTAACCTTAACCTGAGAAGG 65  
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Db 1 TTTGCTTAACCTTAACCTGAGAAGG 25

RESULT 110  
LOCUS AR016060/c 28 bp DNA linear PAT 05-DEC-1998  
DEFINITION Sequence 28 from patent US 5776679.  
ACCESSION AR016060  
VERSION AR016060.1 GI:3972337  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unknown.  
REFERENCE 1 (bases 1 to 28)  
AUTHORS Villeponteau,B., Feng,J., Funk,W. and Andrews,W.H.  
TITLE Assays for the DNA component of human telomerase  
JOURNAL Patent: US 5776679-A 28 07-JUL-1998;  
FEATURES Location/Qualifiers  
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/mol\_type="unassigned DNA"

Query Match 5.5%; Score 25; DB 1; Length 28;  
Best Local Similarity 100.0%; Pred. No. 71;  
Matches 25; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 81 TTTGCTCCCGCGCGCTGTTTTCT 105  
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Db 25 TTTGCTCCCGCGCGCTGTTTTCT 1

RESULT 111  
LOCUS AR075532/c 28 bp DNA linear PAT 30-AUG-2000  
DEFINITION Sequence 29 from patent US 5958680.  
ACCESSION AR075532  
VERSION AR075532.1 GI:10002280  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unknown.  
REFERENCE 1 (bases 1 to 28)  
AUTHORS Villeponteau,B., Feng,J., Funk,W. and Andrews,W.H.  
TITLE Mammalian telomerase  
JOURNAL Patent: US 5958680-A 29 28-SEP-1999;  
FEATURES Location/Qualifiers  
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/organism="unassigned DNA"

Query Match 5.5%; Score 25; DB 1; Length 28;  
Best Local Similarity 100.0%; Pred. No. 71;  
Matches 25; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 81 TTTGCTCCCGCGCGCTGTTTTCT 105  
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Db 25 TTTGCTCCCGCGCGCTGTTTTCT 1

RESULT 112  
LOCUS BD176170/c 28 bp DNA linear PAT 18-MAR-2003  
DEFINITION Mammalian telomerase.  
ACCESSION BD176170  
VERSION BD176170.1 GI:29121876  
KEYWORDS JP 2002272489-A/29.

Query Match 5.5%; Score 25; DB 1; Length 28;  
Best Local Similarity 100.0%; Pred. No. 71;  
Matches 25; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 81 TTTGCTCCCGCGCGCTGTTTTCT 105  
|||||  
Db 25 TTTGCTCCCGCGCGCTGTTTTCT 1

RESULT 114  
LOCUS AR063826/c 30 bp DNA linear PAT 29-SEP-1999  
DEFINITION Sequence 2 from patent US 5846723.  
ACCESSION AR063826  
VERSION AR063826.1 GI:5993134  
KEYWORDS Unknown.

SOURCE unidentified  
ORGANISM unidentified  
REFERENCE 1 (bases 1 to 28)  
AUTHORS Villeponteau,B., Feng,J., Funk,W. and Andrews,W.H.  
TITLE Mammalian telomerase  
JOURNAL Patent: JP 2002272489-A 29 24-SEP-2002;  
COMMENT GERON CORP  
OS Unidentified  
PN JP 2002272489-A/29  
PD 24-SEP-2002  
PF 06-MAR-2002 JP 2002061125  
PR 07-JUL-1994 US 08/272102,27-OCT-1994 US 08/330123 PR  
VILLEPONTEAU, JUNLI FENG, WALTER FUNK, WILLIAM H ANDREWS PC  
C12N15/09,C12N9/99,C12Q1/68,G01N33/53,G01N33/566,C12N15/00 CC  
Strandedness: Single;  
CC Topology: Linear;  
CC Mammalian telomerase  
FH Key Location/Qualifiers  
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FT Location/Qualifiers  
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/mol\_type="genomic DNA"  
/db\_xref="taxon:32644"

Query Match 5.5%; Score 25; DB 1; Length 28;  
Best Local Similarity 100.0%; Pred. No. 71;  
Matches 25; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 81 TTTGCTCCCGCGCGCTGTTTTCT 105  
|||||  
Db 25 TTTGCTCCCGCGCGCTGTTTTCT 1

RESULT 113  
LOCUS AR306479/c 28 bp DNA linear PAT 12-JUN-2003  
DEFINITION Sequence 29 from patent US 6548298.  
ACCESSION AR306479  
VERSION AR306479.1 GI:31696318  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unknown.  
REFERENCE 1 (bases 1 to 28)  
AUTHORS Villeponteau,B., Feng,J., Funk,W. and Andrews,W.H.  
TITLE Mammalian telomerase  
JOURNAL Patent: US 6548298-A 29 15-APR-2003;  
FEATURES Location/Qualifiers  
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Query Match 5.5%; Score 25; DB 1; Length 28;  
Best Local Similarity 100.0%; Pred. No. 71;  
Matches 25; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 81 TTTGCTCCCGCGCGCTGTTTTCT 105  
|||||  
Db 25 TTTGCTCCCGCGCGCTGTTTTCT 1

RESULT 114  
LOCUS AR063826/c 30 bp DNA linear PAT 29-SEP-1999  
DEFINITION Sequence 2 from patent US 5846723.  
ACCESSION AR063826  
VERSION AR063826.1 GI:5993134  
KEYWORDS Unknown.

Query Match 5.5%; Score 25; DB 1; Length 28;  
Best Local Similarity 100.0%; Pred. No. 71;  
Matches 25; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 81 TTTGCTCCCGCGCGCTGTTTTCT 105  
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Db 25 TTTGCTCCCGCGCGCTGTTTTCT 1

RESULT 114  
LOCUS AR063826/c 30 bp DNA linear PAT 29-SEP-1999  
DEFINITION Sequence 2 from patent US 5846723.  
ACCESSION AR063826  
VERSION AR063826.1 GI:5993134  
KEYWORDS Unknown.

[illegible]



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Query Match      5.3%; Score 24; DB 1; Length 24;
Best Local Similarity 100.0%; Pred. No. 71;
Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 46 CTAACCCCTAACTGAGAGGGCGTA 69
|||||
Db 24 CTAACCCCTAACTGAGAGGGCGTA 1

RESULT 118
LOCUS BD225816 24 bp DNA linear PAT 17-JUL-2003
DEFINITION Promoter region of mouse and human telomerase RNA component genes.
ACCESSION BD225816
VERSION BD225816.1 GI:33035586
KEYWORDS JP 2002509699-A/19.
SOURCE synthetic construct
ORGANISM synthetic construct
other sequences; artificial sequences.
REFERENCE 1 (bases 1 to 24)
AUTHORS Keith,W.N.
TITLE Promoter region of mouse and human telomerase RNA component genes
JOURNAL Patent: JP 2002509699-A 19 02-APR-2002;
CANCER RESEARCH CAMPAIGN TECHNOLOGY LTD
OS Artificial Sequence
PN JP 2002509699-A/19
PD 02-APR-2002
PF 29-JAN-1999 JP 2000529424
PR 29-JAN-1998 GB 9801902.9
PI WILLIAM NICOL KEITH
PC C12N15/09,A61K31/7105,A61K31/711,A61K35/76,A61K38/00,A61K45/00,PC
A61K48/00,
PC A61P35/00,C12N1/15,C12N1/19,C12N1/21,C12N5/10,C12P21/02 PC
.C12Q1/68//C12N9/12.
PC [A61K35/76,A61K31:522],C12N15/00,A61K37/02,C12N5/00 CC
Description of Artificial Sequence: Primer
FH Key Location/Qualifiers
FT source 1..24
FT /organism='Artificial Sequence'.

FEATURES
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1..24
Location/Qualifiers
/organism='synthetic construct'
/mol_type='genomic DNA'
/db_xref='taxon:32630'

Query Match      5.3%; Score 24; DB 1; Length 24;
Best Local Similarity 100.0%; Pred. No. 71;
Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 46 CTAACCCCTAACTGAGAGGGCGTA 69
|||||
Db 1 CTAACCCCTAACTGAGAGGGCGTA 24

RESULT 119
LOCUS AR241177 24 bp DNA linear PAT 20-DEC-2002
DEFINITION Sequence 4 from patent US 6468983.
ACCESSION AR241177
VERSION AR241177.1 GI:27286407
KEYWORDS .
SOURCE .
ORGANISM Unknown.
REFERENCE 1 (bases 1 to 24)
AUTHORS Silverman,R.H., Kondo,S., Cowell,J.K., Li,G. and Torrence,P.F.
TITLE RNase L activators and antisense oligonucleotides effective to
treat telomerase-expressing malignancies
JOURNAL Patent: US 6468983-A 4 22-OCT-2002;
FEATURES
source
1..24
Location/Qualifiers
/organism='unknown'

Query Match      5.3%; Score 24; DB 1; Length 24;
Best Local Similarity 100.0%; Pred. No. 71;
Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 46 CTAACCCCTAACTGAGAGGGCGTA 69
|||||
Db 1 CTAACCCCTAACTGAGAGGGCGTA 1

RESULT 120
LOCUS AR241178/c 24 bp DNA linear PAT 20-DEC-2002
DEFINITION Sequence 5 from patent US 6468983.
ACCESSION AR241178
VERSION AR241178.1 GI:27286408
KEYWORDS .
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE 1 (bases 1 to 24)
AUTHORS Silverman,R.H., Kondo,S., Cowell,J.K., Li,G. and Torrence,P.F.
TITLE RNase L activators and antisense oligonucleotides effective to
treat telomerase-expressing malignancies
JOURNAL Patent: US 6468983-A 5 22-OCT-2002;
FEATURES
source
1..24
Location/Qualifiers
/organism='unknown'
/mol_type='genomic DNA'

Query Match      5.3%; Score 24; DB 1; Length 24;
Best Local Similarity 100.0%; Pred. No. 71;
Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 423 CGTGCACCCAGGACTCGGCTCACA 446
|||||
Db 24 CGTGCACCCAGGACTCGGCTCACA 1

RESULT 121
LOCUS AX019549/c 24 bp DNA linear PAT 07-SEP-2000
DEFINITION Sequence 3 from Patent WO9938964.
ACCESSION AX019549
VERSION AX019549.1 GI:10043463
KEYWORDS .
SOURCE synthetic construct
ORGANISM synthetic construct
other sequences; artificial sequences.
REFERENCE 1
AUTHORS Keith,W.N.
TITLE Promoter regions of the mouse and human telomerase rna component
genes
JOURNAL Patent: WO 9938964-A 3 05-AUG-1999;
KEITH WILLIAM NICOL (GB); CANCER RES CAMPAIGN TECH (GB)
FEATURES
source
1..24
Location/Qualifiers
/organism='synthetic construct'
/mol_type='unassigned DNA'
/db_xref='taxon:32630'
/notes='primer'

Query Match      5.3%; Score 24; DB 1; Length 24;
Best Local Similarity 100.0%; Pred. No. 71;
Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 46 CTAACCCCTAACTGAGAGGGCGTA 69
|||||
Db 24 CTAACCCCTAACTGAGAGGGCGTA 1

RESULT 122
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AX019559/c
LOCUS AX019559 24 bp DNA linear PAT 07-SEP-2000
DEFINITION Sequence 13 from Patent WO938964.
ACCESSION AX019559
VERSION AX019559.1 GI:10043473
KEYWORDS
SOURCE
ORGANISM
REFERENCE
AUTHORS Keith,W.N.
TITLE Promoter regions of the mouse and human telomerase rna component
JOURNAL
FEATURES
source
Patent: WO 938964-A 13 05-AUG-1999;
KEITH WILLIAM NICOL (GB); CANCER RES CAMPAIGN TECH (GB)
Location/Qualifiers
1..24
/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/notes="primer"

Query Match 5.3%; Score 24; DB 1; Length 24;
Best Local Similarity 100.0%; Pred. No. 71;
Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 46 CTAACCCCTAACTGAGAAGGGCGTA 69
|||||
Db 24 CTAACCCCTAACTGAGAAGGGCGTA 1

RESULT 123
LOCUS AX019565 24 bp DNA linear PAT 07-SEP-2000
DEFINITION Sequence 19 from Patent WO938964.
ACCESSION AX019565
VERSION AX019565.1 GI:10043479
KEYWORDS
SOURCE
ORGANISM
REFERENCE
AUTHORS Keith,W.N.
TITLE Promoter regions of the mouse and human telomerase rna component
JOURNAL
FEATURES
source
Patent: WO 938964-A 19 05-AUG-1999;
KEITH WILLIAM NICOL (GB); CANCER RES CAMPAIGN TECH (GB)
Location/Qualifiers
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/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/notes="primer"

Query Match 5.3%; Score 24; DB 1; Length 24;
Best Local Similarity 100.0%; Pred. No. 71;
Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 46 CTAACCCCTAACTGAGAAGGGCGTA 69
|||||
Db 1 CTAACCCCTAACTGAGAAGGGCGTA 24

RESULT 124
AX058270/c
LOCUS AX058270 24 bp DNA linear PAT 17-JAN-2001
DEFINITION Sequence 5 from Patent WO0074667.
ACCESSION AX058270
VERSION AX058270.1 GI:12310769
KEYWORDS
SOURCE
ORGANISM
REFERENCE
AUTHORS
TITLE
JOURNAL
FEATURES
source
Patent: WO 938964-A 13 05-AUG-1999;
KEITH WILLIAM NICOL (GB); CANCER RES CAMPAIGN TECH (GB)
Location/Qualifiers
1..24
/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/notes="primer"

Query Match 5.3%; Score 24; DB 1; Length 24;
Best Local Similarity 100.0%; Pred. No. 71;
Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 46 CTAACCCCTAACTGAGAAGGGCGTA 69
|||||
Db 1 CTAACCCCTAACTGAGAAGGGCGTA 24

RESULT 125
LOCUS BD071058 24 bp DNA linear PAT 27-AUG-2002
DEFINITION Modulation of mammalian telomerase by peptide nucleic acids.
ACCESSION BD071058
VERSION BD071058.1 GI:22616661
KEYWORDS JP 2001517929-A/24.
SOURCE unidentified
ORGANISM unclassified.
REFERENCE
1 (bases 1 to 24)
Shay,J.W., Wright,W.E., Piatyszek,M.A., Corey,D. and Norton,J.C.
Modulation of mammalian telomerase by peptide nucleic acids
Patent: JP 2001517929-A 24 09-OCT-2001;
GERON CORP
OS Unidentified
PN JP 2001517929-A/24
PD 09-OCT-2001
PF 09-APR-1997 JP 1997536487
PR 09-APR-1996 US 08/630019
PI JERRY W SHAY,WOODRING E WRIGHT,MIECZYSLAW A PIATYSZEK,DAVID
COREY,
PI JAMES C NORTON
PC C07K14/00,A61K38/16,C12Q1/68
CC Strandedness: Single;
CC Topology: Linear;
CC /desc = 'peptide nucleic acid (PNA), where (deoxy(ribose- CC
phosphate
CC linkages are replaced by N-(2-aminoethyl)glycine units linked
to
CC nucleotide bases via glycine amino N through a CC
methylencarbonyl linker'
FH Key Location/Qualifiers
FT source 1..24
FT /organism='Unidentified'.
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Location/Qualifiers
1..24
/organism="unidentified"
/mol_type="genomic DNA"
/db_xref="taxon:32644"

Query Match 5.3%; Score 24; DB 1; Length 24;
Best Local Similarity 100.0%; Pred. No. 71;
Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 41 TTTCTCTAACCCCTAACTGAGAAGG 64
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Db 1 TTTCTCTAACCCCTAACTGAGAAGG 24

RESULT 126
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BD084640      BD084640      24 bp      DNA      linear      PAT 27-AUG-2002
LOCUS          RNase L activators and antisense oligonucleotides effective to
DEFINITION     treat telomerase-expressing malignancies.
ACCESSION      BD084640
VERSION        BD084640.1 GI:22630250
KEYWORDS       JP 2001524100-A/4.
SOURCE         synthetic construct
ORGANISM       other sequences; artificial sequences.
REFERENCE      1 (bases 1 to 24)
AUTHORS        Silverman,R.H., Kondo,S., Cowell,J.K., Li,G. and Torrence,P.F.
TITLE          RNase L activators and antisense oligonucleotides effective to
JOURNAL        treat telomerase-expressing malignancies
COMMENT        Patent: JP 2001524100-A 4 27-NOV-2001;
                THE CLEVELAND CLINIC FOUNDATION,NATIONAL INSTITUTES OF HEALTH
                OS Artificial Sequence
                PN JP 2001524100-A/4
                PD 27-NOV-2001
                PF 13-APR-1998 JP 1998546125
                PR 21-APR-1997 US 60/044507,03-FEB-1998 US 09/018125 PI
                ROBERT H SILVERMAN,SEIJI KONDO,JOHN K COWELL,GUYING LI,PAUL F
                PI TORRENCE
                PC C07H21/00,C07H21/02,C12Q1/68,A61K48/00
                CC Description of Artificial Sequence: primer
                FH Key Location/Qualifiers
                FT source 1..24
                /organism='Artificial Sequence'.
FEATURES       source
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               /db_xref="taxon:32630"
Query Match    5.3%; Score 24; DB 1; Length 24;
Best Local Similarity 100.0%; Pred.No. 71;
Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 41 TTTGCTCTAACCCCTAACTGAGAAGG 64
Db 1 TTTGCTCTAACCCCTAACTGAGAAGG 24
RESULT 127
BD084641/c
LOCUS          BD084641      24 bp      DNA      linear      PAT 27-AUG-2002
DEFINITION     RNase L activators and antisense oligonucleotides effective to
                treat telomerase-expressing malignancies.
ACCESSION      BD084641
VERSION        BD084641.1 GI:22630251
KEYWORDS       JP 2001524100-A/5.
SOURCE         synthetic construct
ORGANISM       other sequences; artificial sequences.
REFERENCE      1 (bases 1 to 24)
AUTHORS        Silverman,R.H., Kondo,S., Cowell,J.K., Li,G. and Torrence,P.F.
TITLE          RNase L activators and antisense oligonucleotides effective to
JOURNAL        treat telomerase-expressing malignancies
COMMENT        Patent: JP 2001524100-A 5 27-NOV-2001;
                THE CLEVELAND CLINIC FOUNDATION,NATIONAL INSTITUTES OF HEALTH
                OS Artificial Sequence
                PN JP 2001524100-A/5
                PD 27-NOV-2001
                PF 13-APR-1998 JP 1998546125
                PR 21-APR-1997 US 60/044507,03-FEB-1998 US 09/018125 PI
                ROBERT H SILVERMAN,SEIJI KONDO,JOHN K COWELL,GUYING LI,PAUL F
                PI TORRENCE
                PC C07H21/00,C07H21/02,C12Q1/68,A61K48/00
                CC Description of Artificial Sequence: primer
                FH Key Location/Qualifiers
                FT source 1..24
                /organism='Artificial Sequence'.
FEATURES       source
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               /organism="synthetic construct"
               /mol_type="genomic DNA"
               /db_xref="taxon:32630"
Query Match    5.3%; Score 24; DB 1; Length 24;
Best Local Similarity 100.0%; Pred.No. 71;
Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 41 TTTGCTCTAACCCCTAACTGAGAAGG 64
Db 1 TTTGCTCTAACCCCTAACTGAGAAGG 24
RESULT 127
BD084641/c
LOCUS          BD084641      24 bp      DNA      linear      PAT 27-AUG-2002
DEFINITION     RNase L activators and antisense oligonucleotides effective to
                treat telomerase-expressing malignancies.
ACCESSION      BD084641
VERSION        BD084641.1 GI:22630251
KEYWORDS       JP 2001524100-A/5.
SOURCE         synthetic construct
ORGANISM       other sequences; artificial sequences.
REFERENCE      1 (bases 1 to 24)
AUTHORS        Silverman,R.H., Kondo,S., Cowell,J.K., Li,G. and Torrence,P.F.
TITLE          RNase L activators and antisense oligonucleotides effective to
JOURNAL        treat telomerase-expressing malignancies
COMMENT        Patent: JP 2001524100-A 5 27-NOV-2001;
                THE CLEVELAND CLINIC FOUNDATION,NATIONAL INSTITUTES OF HEALTH
                OS Artificial Sequence
                PN JP 2001524100-A/5
                PD 27-NOV-2001
                PF 13-APR-1998 JP 1998546125
                PR 21-APR-1997 US 60/044507,03-FEB-1998 US 09/018125 PI
                ROBERT H SILVERMAN,SEIJI KONDO,JOHN K COWELL,GUYING LI,PAUL F
                PI TORRENCE
                PC C07H21/00,C07H21/02,C12Q1/68,A61K48/00
                CC Description of Artificial Sequence: primer
                FH Key Location/Qualifiers
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FEATURES       source
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Query Match    5.3%; Score 24; DB 1; Length 24;
Best Local Similarity 100.0%; Pred.No. 71;
Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 423 CGTGACCCAGGACTCGGCTCACA 446
Db 24 CGTGACCCAGGACTCGGCTCACA 1
RESULT 128
BD131326/c
LOCUS          BD131326      25 bp      DNA      linear      PAT 18-SEP-2002
DEFINITION     Telomerase assay of bodily fluid for cancer screening and
                evaluation of disease phase and prognosis.
ACCESSION      BD131326
VERSION        BD131326.1 GI:23226271
KEYWORDS       JP 2002503480-A/4.
SOURCE         synthetic construct
ORGANISM       other sequences; artificial sequences.
REFERENCE      1 (bases 1 to 25)
AUTHORS        Strovel,J.W., Stamberg,J., Highsmith,E. and Abruzzo,L.V.
TITLE          Telomerase assay of bodily fluid for cancer screening and
JOURNAL        evaluation of disease phase and prognosis
COMMENT        Patent: JP 2002503480-A 4 05-FEB-2002;
                UNIVERSITY OF MARYLAND BALTIMORE
                OS Artificial Sequence
                PN JP 2002503480-A/4
                PD 05-FEB-2002
                PF 16-FEB-1999 JP 20005311587
                PR 16-FEB-1998 US 60/074793
                PI JEFFREY W STROVEL,JUDITH STAMBERG,EDWARD HIGHSMITH,LYNNE V PI
                ABRUZZO
                PC C12Q1/68,C12N15/09,C12P19/34,C12N15/00
                CC Description of Artificial Sequence: R3c, synthesized, Gibco-
                CC BRL
                FH Key Location/Qualifiers
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Query Match    5.3%; Score 24; DB 1; Length 25;
Best Local Similarity 100.0%; Pred.No. 74;
Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 145 CTTCCACCGTTCATTCTAGAGCAA 168
Db 25 CTTCCACCGTTCATTCTAGAGCAA 2
RESULT 129
BD071059
LOCUS          BD071059      23 bp      DNA      linear      PAT 27-AUG-2002
DEFINITION     Modulation of mammalian telomerase by peptide nucleic acids.
ACCESSION      BD071059
VERSION        BD071059.1 GI:22616662
KEYWORDS       JP 2001517929-A/25.
SOURCE         unidentified
ORGANISM       unclassified.
REFERENCE      1 (bases 1 to 23)
AUTHORS        Shay,J.W., Wright,W.E., Piatyazek,M.A., Corey,D. and Norton,J.C.
TITLE          Modulation of mammalian telomerase by peptide nucleic acids
JOURNAL        Patent: JP 2001517929-A 25 09-OCT-2001;

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/organism="synthetic construct"
/mol_type="genomic DNA"
/db_xref="taxon:32630"
Query Match    5.3%; Score 24; DB 1; Length 24;
Best Local Similarity 100.0%; Pred.No. 71;
Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 423 CGTGACCCAGGACTCGGCTCACA 446
Db 24 CGTGACCCAGGACTCGGCTCACA 1
RESULT 128
BD131326/c
LOCUS          BD131326      25 bp      DNA      linear      PAT 18-SEP-2002
DEFINITION     Telomerase assay of bodily fluid for cancer screening and
                evaluation of disease phase and prognosis.
ACCESSION      BD131326
VERSION        BD131326.1 GI:23226271
KEYWORDS       JP 2002503480-A/4.
SOURCE         synthetic construct
ORGANISM       other sequences; artificial sequences.
REFERENCE      1 (bases 1 to 25)
AUTHORS        Strovel,J.W., Stamberg,J., Highsmith,E. and Abruzzo,L.V.
TITLE          Telomerase assay of bodily fluid for cancer screening and
JOURNAL        evaluation of disease phase and prognosis
COMMENT        Patent: JP 2002503480-A 4 05-FEB-2002;
                UNIVERSITY OF MARYLAND BALTIMORE
                OS Artificial Sequence
                PN JP 2002503480-A/4
                PD 05-FEB-2002
                PF 16-FEB-1999 JP 20005311587
                PR 16-FEB-1998 US 60/074793
                PI JEFFREY W STROVEL,JUDITH STAMBERG,EDWARD HIGHSMITH,LYNNE V PI
                ABRUZZO
                PC C12Q1/68,C12N15/09,C12P19/34,C12N15/00
                CC Description of Artificial Sequence: R3c, synthesized, Gibco-
                CC BRL
                FH Key Location/Qualifiers
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                /organism='Artificial Sequence'.
FEATURES       source
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               /organism="synthetic construct"
               /mol_type="genomic DNA"
               /db_xref="taxon:32630"
Query Match    5.3%; Score 24; DB 1; Length 25;
Best Local Similarity 100.0%; Pred.No. 74;
Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 145 CTTCCACCGTTCATTCTAGAGCAA 168
Db 25 CTTCCACCGTTCATTCTAGAGCAA 2
RESULT 129
BD071059
LOCUS          BD071059      23 bp      DNA      linear      PAT 27-AUG-2002
DEFINITION     Modulation of mammalian telomerase by peptide nucleic acids.
ACCESSION      BD071059
VERSION        BD071059.1 GI:22616662
KEYWORDS       JP 2001517929-A/25.
SOURCE         unidentified
ORGANISM       unclassified.
REFERENCE      1 (bases 1 to 23)
AUTHORS        Shay,J.W., Wright,W.E., Piatyazek,M.A., Corey,D. and Norton,J.C.
TITLE          Modulation of mammalian telomerase by peptide nucleic acids
JOURNAL        Patent: JP 2001517929-A 25 09-OCT-2001;

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GERON CORP  
 OS Unidentified  
 PN JP 2001517929-A/25  
 PD 09-OCT-2001  
 PF 09-APR-1997 JP 1997536487  
 PR 09-APR-1996 US 08/630019  
 PI JERRY W SHAY, WOODRING E WRIGHT, MIECZYSLAW A PIATYSZEK, DAVID  
 PI COREY,  
 PI JAMES C NORTON  
 PC C07K14/00, A61K38/16, C12Q1/68  
 CC Strandedness: Single;  
 CC Topology: Linear;  
 CC /desc = 'peptide nucleic acid (PNA), where (deoxy(ribose- CC  
 phosphate  
 CC linkages are replaced by N-(2-aminoethyl)glycine units linked  
 CC to  
 CC nucleotide bases via glycine amino N through a CC  
 methylenecarbonyl linker'  
 FH Key  
 FT source 1. .23 Location/Qualifiers  
 FT /organism='Unidentified'.  
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 /db\_xref='taxon:32644'  
 Query Match 5.1%; Score 23; DB 1; Length 23;  
 Best Local Similarity 100.0%; Pred. No. 80;  
 Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Qy 35 CCATTTTGTGTAACCCCTAACT 57  
 Db 1 CCAATTTTGTGTAACCCCTAACT 23  
 RESULT 130  
 BD225841  
 LOCUS Promoter region of mouse and human telomerase RNA component genes.  
 DEFINITION  
 ACCESSION BD225841  
 VERSION BD225841.1 GI:33035611  
 KEYWORDS JP 2002509699-A/44.  
 SOURCE synthetic construct  
 ORGANISM other sequences; artificial sequences.  
 REFERENCE 1 (bases 1 to 25)  
 AUTHORS Keith, W.N.  
 TITLE Promoter region of mouse and human telomerase RNA component genes  
 JOURNAL Patent: JP 2002509699-A 44 02-APR-2002;  
 COMMENT OS Artificial Sequence  
 PN JP 2002509699-A/44  
 PD 02-APR-2002  
 PF 29-JAN-1999 JP 2000529424  
 PR 29-JAN-1998 GB 9801902.9  
 PI WILLIAM NICOL KEITH  
 PC C12N15/09, A61K31/7105, A61K31/711, A61K35/76, A61K38/00, A61K45/00, PC  
 A61K48/00,  
 PC A61P35/00, C12N1/15, C12N1/19, C12N1/21, C12N5/10, C12P21/02 PC  
 C12Q1/68/C12N9/12,  
 PC A61K3/76, A61K31:522, C12N15/00, A61K37/02, C12N5/00 CC  
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 FT source 1. .25  
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 /db\_xref='taxon:32630'

Query Match 5.1%; Score 23; DB 1; Length 25;  
 Best Local Similarity 100.0%; Pred. No. 87;  
 Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Qy 1 GGGTTGCGGAGGGTGGGCTGGG 23  
 Db 3 GGGTTGCGGAGGGTGGGCTGGG 25  
 RESULT 131  
 AX019590  
 LOCUS Sequence 44 from Patent WO938964.  
 DEFINITION 25 bp DNA linear PAT 07-SEP-2000  
 ACCESSION AX019590  
 VERSION AX019590.1 GI:10043504  
 KEYWORDS synthetic construct  
 SOURCE other sequences; artificial sequences.  
 ORGANISM Keith, W.N.  
 REFERENCE 1 Promoter regions of the mouse and human telomerase rna component  
 AUTHORS genes  
 TITLE Patent: WO 938964-A 44 05-AUG-1999;  
 JOURNAL KEITH WILLIAM NICOL (GB); CANCER RES CAMPAIGN TECH (GB)  
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 /db\_xref='taxon:32630'  
 /note='Oligonucleotide'  
 Query Match 5.1%; Score 23; DB 1; Length 25;  
 Best Local Similarity 100.0%; Pred. No. 87;  
 Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Qy 1 GGGTTGCGGAGGGTGGGCTGGG 23  
 Db 3 GGGTTGCGGAGGGTGGGCTGGG 25  
 RESULT 132  
 AR016064/c  
 LOCUS Sequence 32 from patent US 5776679.  
 DEFINITION 22 bp DNA linear PAT 05-DEC-1998  
 ACCESSION AR016064  
 VERSION AR016064.1 GI:3972341  
 KEYWORDS Unknown.  
 SOURCE Unassigned.  
 ORGANISM Unclassified.  
 REFERENCE 1 (bases 1 to 22)  
 AUTHORS Villeponteau, B., Feng, J., Funk, W., and Andrews, W.H.  
 TITLE Assays for the DNA component of human telomerase  
 JOURNAL Patent: US 5776679-A 32 07-JUL-1998;  
 FEATURES Location/Qualifiers  
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 /mol\_type='unassigned DNA'  
 Query Match 4.9%; Score 22; DB 1; Length 22;  
 Best Local Similarity 100.0%; Pred. No. 90;  
 Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Qy 183 CTGCTGGCCCGTTCGCCCTCC 204  
 Db 22 CTGCTGGCCCGTTCGCCCTCC 1  
 RESULT 133  
 AR059220/c  
 LOCUS Sequence 27 from patent US 5837857.  
 DEFINITION 22 bp DNA linear PAT 29-SEP-1999



REFERENCE 1 (bases 1 to 22)  
AUTHORS Villeponteau,B., Feng,J., Funk,W. and Andrews,W.H.  
TITLE Mammalian telomerase  
JOURNAL Patent: JP 2002272489-A 9 24-SEP-2002;  
GERON CORP

COMMENT OS Unidentified  
PN JP 2002272489-A/9  
PD 24-SEP-2002  
PF 06-MAR-2002 JP 2002061125 08/272102,27-OCT-1994 US 08/330123 PR  
PR 07-JUL-1994 US 08/472802,07-JUN-1995 US 08/482115 PI BRYANT  
07-JUN-1995 US 08/472802,07-JUN-1995 US 08/482115 PI BRYANT  
VILLEPONTEAU,JUNLI FENG,WALTER FUNK,WILLIAM H ANDREWS PC  
C12N15/09,C12N9/99,C12Q1/68,G01N33/53,G01N33/566,C12N15/00 CC  
Strandedness: Single;  
CC Topology: Linear;  
CC Mammalian telomerase  
FH Key Location/Qualifiers  
FT source 1..22 /organism='Unidentified'.  
FT Location/Qualifiers  
FT 1..22 /organism='unidentified'  
/mol\_type='genomic DNA'  
/db\_xref='taxon:32644'

Query Match 4.9%; Score 22; DB 1; Length 22;  
Best Local Similarity 100.0%; Pred. No. 90;  
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 46 CTAACCTTAAGGAGGGCG 67  
|||||  
Db 22 CTAACCTTAAGGAGGGCG 1

RESULT 139  
BD176151/c  
LOCUS Mammalian telomerase.  
DEFINITION BD176151  
ACCESSION BD176151  
VERSION BD176151.1 GI:29121855  
KEYWORDS JP 2002272489-A/10.  
SOURCE unidentified  
ORGANISM unclassified.

REFERENCE 1 (bases 1 to 22)  
AUTHORS Villeponteau,B., Feng,J., Funk,W. and Andrews,W.H.  
TITLE Mammalian telomerase  
JOURNAL Patent: JP 2002272489-A 10 24-SEP-2002;  
GERON CORP

COMMENT OS Unidentified  
PN JP 2002272489-A/10  
PD 24-SEP-2002  
PF 06-MAR-2002 JP 2002061125 08/272102,27-OCT-1994 US 08/330123 PR  
PR 07-JUL-1994 US 08/472802,07-JUN-1995 US 08/482115 PI BRYANT  
07-JUN-1995 US 08/472802,07-JUN-1995 US 08/482115 PI BRYANT  
VILLEPONTEAU,JUNLI FENG,WALTER FUNK,WILLIAM H ANDREWS PC  
C12N15/09,C12N9/99,C12Q1/68,G01N33/53,G01N33/566,C12N15/00 CC  
Strandedness: Single;  
CC Topology: Linear;  
CC Mammalian telomerase  
FH Key Location/Qualifiers  
FT source 1..22 /organism='Unidentified'.  
FT Location/Qualifiers  
FT 1..22 /organism='unidentified'  
/mol\_type='genomic DNA'  
/db\_xref='taxon:32644'

Query Match 4.9%; Score 22; DB 1; Length 22;  
Best Local Similarity 100.0%; Pred. No. 90;  
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 46 CTAACCTTAAGGAGGGCG 67  
|||||  
Db 22 CTAACCTTAAGGAGGGCG 1

RESULT 140  
BD176173/c  
LOCUS Mammalian telomerase.  
DEFINITION BD176173  
ACCESSION BD176173  
VERSION BD176173.1 GI:29121879  
KEYWORDS JP 2002272489-A/32.  
SOURCE unidentified  
ORGANISM unclassified.

REFERENCE 1 (bases 1 to 22)  
AUTHORS Villeponteau,B., Feng,J., Funk,W. and Andrews,W.H.  
TITLE Mammalian telomerase  
JOURNAL Patent: JP 2002272489-A 32 24-SEP-2002;  
GERON CORP

COMMENT OS Unidentified  
PN JP 2002272489-A/32  
PD 24-SEP-2002  
PF 06-MAR-2002 JP 2002061125 08/272102,27-OCT-1994 US 08/330123 PR  
PR 07-JUL-1994 US 08/472802,07-JUN-1995 US 08/482115 PI BRYANT  
07-JUN-1995 US 08/472802,07-JUN-1995 US 08/482115 PI BRYANT  
VILLEPONTEAU,JUNLI FENG,WALTER FUNK,WILLIAM H ANDREWS PC  
C12N15/09,C12N9/99,C12Q1/68,G01N33/53,G01N33/566,C12N15/00 CC  
Strandedness: Single;  
CC Topology: Linear;  
CC Mammalian telomerase  
FH Key Location/Qualifiers  
FT source 1..22 /organism='Unidentified'.  
FT Location/Qualifiers  
FT 1..22 /organism='unidentified'  
/mol\_type='genomic DNA'  
/db\_xref='taxon:32644'

Query Match 4.9%; Score 22; DB 1; Length 22;  
Best Local Similarity 100.0%; Pred. No. 90;  
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 183 CTGCTGGCCGTTCCGCCCTCC 204  
|||||  
Db 22 CTGCTGGCCGTTCCGCCCTCC 1

RESULT 141  
I31752/c  
LOCUS Sequence 5 from patent US 5583016.  
DEFINITION I31752  
ACCESSION I31752  
VERSION I31752.1 GI:1822543  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unknown.

REFERENCE 1 (bases 1 to 22)  
AUTHORS Villeponteau,B., Feng,J., Funk,W. and Andrews,W.H.  
TITLE Mammalian telomerase  
JOURNAL Patent: US 5583016-A 5 10-DEC-1996;  
FEATURES Location/Qualifiers  
source 1..22 /organism='unknown'  
/mol\_type='unassigned DNA'

Query Match 4.9%; Score 22; DB 1; Length 22;  
Best Local Similarity 100.0%; Pred. No. 90;  
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 46 CTAACCTTAAGGAGGGCG 67

Db 22 CTAACCCCTAACTGAGAGGGCG 1  
|||||  
RESULT 142  
I31753/c 131753 22 bp DNA linear PAT 06-FEB-1997  
LOCUS  
DEFINITION Sequence 6 from patent US 5583016.  
ACCESSION I31753  
VERSION I31753.1 GI:1822544  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unknown.  
REFERENCE 1 (bases 1 to 22)  
AUTHORS Villeponteau,B., Feng,J., Funk,W. and Andrews,W.H.  
TITLE Mammalian telomerase  
JOURNAL Patent: US 5583016-A 6 10-DEC-1996;  
FEATURES Location/Qualifiers  
source 1..22  
/organism="unknown"  
/mol\_type="unassigned DNA"  
Query Match 4.9%; Score 22; DB 1; Length 22;  
Best Local Similarity 100.0%; Pred. No. 90;  
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Qy 54 AACTGAGAGGGCGCTAGGCGCC 75  
|||||  
Db 22 AACTGAGAGGGCGCTAGGCGCC 1  
|||||  
RESULT 143  
AR279617/c AR279617 22 bp DNA linear PAT 10-APR-2003  
LOCUS  
DEFINITION Sequence 2 from patent US 6517834.  
ACCESSION AR279617  
VERSION AR279617.1 GI:29714511  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unknown.  
REFERENCE 1 (bases 1 to 22)  
AUTHORS Weinrich,S.L., Atkinson,E.M. III, Lichtsteiner,S.P., Vasserot,A.P.  
TITLE Purified telomerase  
JOURNAL Patent: US 6517834-A 2 11-FEB-2003;  
FEATURES Location/Qualifiers  
source 1..22  
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Query Match 4.9%; Score 22; DB 1; Length 22;  
Best Local Similarity 100.0%; Pred. No. 90;  
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Qy 46 CTAACCCCTAACTGAGAGGGCG 67  
|||||  
Db 22 CTAACCCCTAACTGAGAGGGCG 1  
|||||  
RESULT 144  
AR305068/c AR305068 22 bp DNA linear PAT 12-JUN-2003  
LOCUS  
DEFINITION Sequence 2 from patent US 6545133.  
ACCESSION AR305068  
VERSION AR305068.1 GI:31694375  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unknown.  
REFERENCE 1 (bases 1 to 22)  
AUTHORS Weinrich,S.L., Atkinson,E.M. III, Lichtsteiner,S.P., Vasserot,A.P.

and Pruzan,R.A.  
Methods for purifying telomerase  
Patent: US 6545133-A 2 08-APR-2003;  
FEATURES Location/Qualifiers  
source 1..22  
/organism="unknown"  
/mol\_type="genomic DNA"  
Query Match 4.9%; Score 22; DB 1; Length 22;  
Best Local Similarity 100.0%; Pred. No. 90;  
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Qy 46 CTAACCCCTAACTGAGAGGGCG 67  
|||||  
Db 22 CTAACCCCTAACTGAGAGGGCG 1  
|||||  
RESULT 145  
AR306489/c AR306489 22 bp RNA linear PAT 12-JUN-2003  
LOCUS  
DEFINITION Sequence 41 from patent US 6548298.  
ACCESSION AR306489  
VERSION AR306489.1 GI:31696328  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unknown.  
REFERENCE 1 (bases 1 to 22)  
AUTHORS Villeponteau,B., Feng,J., Funk,W. and Andrews,W.H.  
TITLE Mammalian telomerase  
JOURNAL Patent: US 6548298-A 41 15-APR-2003;  
FEATURES Location/Qualifiers  
source 1..22  
/organism="unknown"  
/mol\_type="unassigned RNA"  
Query Match 4.9%; Score 22; DB 1; Length 22;  
Best Local Similarity 100.0%; Pred. No. 90;  
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Qy 46 CTAACCCCTAACTGAGAGGGCG 67  
|||||  
Db 22 CTAACCCCTAACTGAGAGGGCG 1  
|||||  
RESULT 146  
AR306490/c AR306490 22 bp RNA linear PAT 12-JUN-2003  
LOCUS  
DEFINITION Sequence 42 from patent US 6548298.  
ACCESSION AR306490  
VERSION AR306490.1 GI:31696329  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unknown.  
REFERENCE 1 (bases 1 to 22)  
AUTHORS Villeponteau,B., Feng,J., Funk,W. and Andrews,W.H.  
TITLE Mammalian telomerase  
JOURNAL Patent: US 6548298-A 42 15-APR-2003;  
FEATURES Location/Qualifiers  
source 1..22  
/organism="unknown"  
/mol\_type="unassigned RNA"  
Query Match 4.9%; Score 22; DB 1; Length 22;  
Best Local Similarity 100.0%; Pred. No. 90;  
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Qy 54 AACTGAGAGGGCGCTAGGCGCC 75  
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Db 22 AACTGAGAGGGCGCTAGGCGCC 1  
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RESULT 147  
LOCUS AR016057 21 bp DNA linear PAT 05-DEC-1998  
DEFINITION Sequence 25 from patent US 5776679.  
ACCESSION AR016057  
VERSION AR016057.1 GI:3972334  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unknown.  
REFERENCE 1 (bases 1 to 21)  
AUTHORS Villeponteau,B., Feng,J., Funk,W. and Andrews,W.H.  
TITLE Assays for the DNA component of human telomerase  
JOURNAL Patent: US 5776679-A 25 07-JUL-1998;  
FEATURES Location/Qualifiers  
source 1..21  
/organism="unknown"  
/mol\_type="unassigned DNA"

Query Match 4.7%; Score 21; DB 1; Length 21;  
Best Local Similarity 100.0%; Pred. No. 1e+02;  
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 184 TGCTGGCCCGTTGCCCTCC 204  
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Db 21 TGCTGGCCCGTTGCCCTCC 1

RESULT 148  
LOCUS AR059218 21 bp DNA linear PAT 29-SEP-1999  
DEFINITION Sequence 25 from patent US 5837857.  
ACCESSION AR059218  
VERSION AR059218.1 GI:5984795  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unknown.  
REFERENCE 1 (bases 1 to 21)  
AUTHORS Villeponteau,B., Feng,J., Funk,W. and Andrews,W.H.  
TITLE Mammalian telomerase  
JOURNAL Patent: US 5837857-A 25 17-NOV-1998;  
FEATURES Location/Qualifiers  
source 1..21  
/organism="unknown"  
/mol\_type="unassigned DNA"

Query Match 4.7%; Score 21; DB 1; Length 21;  
Best Local Similarity 100.0%; Pred. No. 1e+02;  
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 184 TGCTGGCCCGTTGCCCTCC 204  
|||||  
Db 21 TGCTGGCCCGTTGCCCTCC 1

RESULT 149  
LOCUS AR075529 21 bp DNA linear PAT 30-AUG-2000  
DEFINITION Sequence 26 from patent US 5958680.  
ACCESSION AR075529  
VERSION AR075529.1 GI:10002277  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unknown.  
REFERENCE 1 (bases 1 to 21)  
AUTHORS Villeponteau,B., Feng,J., Funk,W. and Andrews,W.H.  
TITLE Mammalian telomerase  
JOURNAL Patent: US 5958680-A 26 28-SEP-1999;  
FEATURES Location/Qualifiers  
source 1..21  
/organism="unknown"

/mol\_type="unassigned DNA"

Query Match 4.7%; Score 21; DB 1; Length 21;  
Best Local Similarity 100.0%; Pred. No. 1e+02;  
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 184 TGCTGGCCCGTTGCCCTCC 204  
|||||  
Db 21 TGCTGGCCCGTTGCCCTCC 1

RESULT 150  
LOCUS AR161927 21 bp DNA linear PAT 17-OCT-2001  
DEFINITION Sequence 25 from patent US 6258535.  
ACCESSION AR161927  
VERSION AR161927.1 GI:16228955  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unknown.  
REFERENCE 1 (bases 1 to 21)  
AUTHORS Villeponteau,B., Feng,J., Funk,W. and Andrews,W.H.  
TITLE Mammalian telomerase  
JOURNAL Patent: US 6258535-A 25 10-JUL-2001;  
FEATURES Location/Qualifiers  
source 1..21  
/organism="unknown"  
/mol\_type="unassigned DNA"

Query Match 4.7%; Score 21; DB 1; Length 21;  
Best Local Similarity 100.0%; Pred. No. 1e+02;  
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 184 TGCTGGCCCGTTGCCCTCC 204  
|||||  
Db 21 TGCTGGCCCGTTGCCCTCC 1

RESULT 151  
LOCUS BD176168 21 bp DNA linear PAT 18-MAR-2003  
DEFINITION Mammalian telomerase.  
ACCESSION BD176168  
VERSION BD176168.1 GI:29121874  
KEYWORDS JP 2002272489-A/27.  
SOURCE unidentified  
ORGANISM unidentified.  
REFERENCE 1 (bases 1 to 21)  
AUTHORS Villeponteau,B., Feng,J., Funk,W. and Andrews,W.H.  
TITLE Mammalian telomerase  
JOURNAL Patent: JP 2002272489-A 27 24-SEP-2002;  
COMMENT GERON CORP  
OS Unidentified  
PN JP 2002272489-A/27  
PD 24-SEP-2002  
PF 06-MAR-2002 JP 2002061125  
PR 07-JUL-1994 US 08/272102,27-OCT-1994 US 08/330123 PR  
07-JUN-1995 US 08/472802,07-JUN-1995 US 08/482115 PI BRYANT  
VILLEPONTEAU,JUNLI FENG,WALTER FUNK,WILLIAM H ANDREWS PC  
C12N15/09,C12N9/99,C12Q1/68,G01N33/53,G01N33/566,C12N15/00 CC  
Strandedness: Single;  
CC Topology: Linear;  
CC Mammalian telomerase  
FH Key Location/Qualifiers  
FT source 1..21  
/organism='Unidentified'.  
/mol\_type='genomic DNA'  
/db\_xref='taxon:32644'



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Query Match 4.7%; Score 21; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 184 TGCTGGCCCGTTCGCCCTCC 204
Db 21 TGCTGGCCCGTTCGCCCTCC 1

RESULT 152
I31772/c 131772 21 bp DNA linear PAT 06-FEB-1997
DEFINITION Sequence 25 from patent US 5583016.
ACCESSION I31772
VERSION I31772.1 GI:1822563
KEYWORDS
SOURCE
ORGANISM Unknown.
REFERENCE 1 (bases 1 to 21)
AUTHORS Villeponteau,B., Feng,J., Funk,W. and Andrews,W.H.
TITLE Mammalian telomerase
JOURNAL Patent: US 5583016-A 25 10-DEC-1996;
FEATURES Location/Qualifiers
source 1..21
/organism="unknown"
/mol_type="unassigned DNA"

Query Match 4.7%; Score 21; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 184 TGCTGGCCCGTTCGCCCTCC 204
Db 21 TGCTGGCCCGTTCGCCCTCC 1

RESULT 153
AR306475/c 1306475 21 bp DNA linear PAT 12-JUN-2003
DEFINITION Sequence 25 from patent US 6548298.
ACCESSION AR306475
VERSION AR306475.1 GI:31696314
KEYWORDS
SOURCE
ORGANISM Unknown.
REFERENCE 1 (bases 1 to 21)
AUTHORS Villeponteau,B., Feng,J., Funk,W. and Andrews,W.H.
TITLE Mammalian telomerase
JOURNAL Patent: US 6548298-A 25 15-APR-2003;
FEATURES Location/Qualifiers
source 1..21
/organism="unknown"
/mol_type="genomic DNA"

Query Match 4.7%; Score 21; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 184 TGCTGGCCCGTTCGCCCTCC 204
Db 21 TGCTGGCCCGTTCGCCCTCC 1

RESULT 154
A84593/c 184593 22 bp DNA linear PAT 21-JAN-2000
DEFINITION Sequence 3 from Patent WO9845450.
ACCESSION A84593
VERSION A84593.1 GI:6733509
KEYWORDS

SOURCE unidentified
ORGANISM unidentified
unclassified.
REFERENCE 1 (bases 1 to 22)
AUTHORS Atkinson,E.M. and Kealey,J.T.
TITLE PURIFIED TELOMERASE
JOURNAL Patent: WO 9845450-A 3 15-OCT-1998;
GERON CORP (US)
FEATURES Location/Qualifiers
source 1..22
/organism="unidentified"
/mol_type="unassigned DNA"
/db_xref="taxon:32844"
modified_base 1
/notes="N = BIOTINYLATED C"
/mod_base=OTHER

Query Match 4.7%; Score 21; DB 1; Length 22;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 46 CTAACCCCTAACTGAGAAGGC 66
Db 22 CTAACCCCTAACTGAGAAGGC 2

RESULT 155
AR079890/c 1079890 22 bp DNA linear PAT 31-AUG-2000
DEFINITION Sequence 3 from patent US 5968506.
ACCESSION AR079890
VERSION AR079890.1 GI:10006643
KEYWORDS
SOURCE
ORGANISM Unknown.
REFERENCE 1 (bases 1 to 22)
AUTHORS Weinrich,S.L., Atkinson,E.M. III, Lichtsteiner,S.P., Vasserot,A.P.,
Pruzan,R.A. and Kealey,J.T.
TITLE Purified telomerase
JOURNAL Patent: US 5968506-A 3 19-OCT-1999;
FEATURES Location/Qualifiers
source 1..22
/organism="unknown"
/mol_type="unassigned DNA"

Query Match 4.7%; Score 21; DB 1; Length 22;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 46 CTAACCCCTAACTGAGAAGGC 66
Db 22 CTAACCCCTAACTGAGAAGGC 2

RESULT 156
BD058134/c 1058134 22 bp DNA linear PAT 27-AUG-2002
DEFINITION Purified telomerase.
ACCESSION BD058134
VERSION BD058134.1 GI:22603740
KEYWORDS
SOURCE
ORGANISM Zea mays
Zea mays
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae; PACCAD
clade; Panicoideae; Andropogoneae; Zea.
REFERENCE 1 (bases 1 to 22)
AUTHORS Weinrich,S.L., Iii,E.M.A., Lichtsteiner,S.P., Vasserot,A.P.,
Pruzan,R.A. and Kealey,J.T.
TITLE Purified telomerase
JOURNAL Patent: JP 2001509681-A 3 24-JUL-2001;
GERON CORP
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COMMENT      PN  JP 2001509681-A/3
PD 24-JUL-2001
PF 04-APR-1997 JP 1998542718
PI SCOTT L WEINRICH, EDWARD M ATKINSON III, SERGE P LICHTSTEINER,
PI ALAIN P VASSEROT, RONALD A PRUZAN, JAMES T KEALEY PC
C12N15/54, C12N9/12, C07K16/40, C12Q1/68, C07K14/47 CC Strandedness:
Single;
CC Topology: Linear;
CC /mod_base= OTHER;
CC /note= 'N = biotinylated C'
CC /note= 'oligonucleotide P3'
FH Key Location/Qualifiers
FT modified base 1.

FEATURES
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/organism="Zea mays"
/mol_type="genomic DNA"
/db_xref="taxon:4577"

Query Match
Best Local Similarity 4.7%; Score 21; DB 1; Length 22;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 46 CTAACCCCTAACTGAGAAGGC 66
|||||
Db 22 CTAACCCCTAACTGAGAAGGC 2

RESULT 157
A84604/c
LOCUS A84604 20 bp DNA linear PAT 21-JAN-2000
DEFINITION Sequence 14 from Patent WO9845450.
ACCESSION A84604
VERSION A84604.1 GI:6733517
KEYWORDS
SOURCE
ORGANISM
REFERENCE 1 (bases 1 to 20)
AUTHORS Atkinson, E.M. and Kealey, J.T.
TITLE PURIFIED TELOMERASE
JOURNAL Patent: WO 9845450-A 14 15-OCT-1998;
GERON CORP (US)
FEATURES
source
1..20
/organism="unidentified"
/mol_type="unassigned DNA"
/db_xref="taxon:32644"

Query Match
Best Local Similarity 4.4%; Score 20; DB 1; Length 20;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 361 AGCGCCGAGGAGGAGGACG 380
|||||
Db 20 AGCGCCGAGGAGGAGGACG 1

RESULT 158
AR016039/c
LOCUS AR016039 20 bp DNA linear PAT 05-DEC-1998
DEFINITION Sequence 7 from patent US 5776679.
ACCESSION AR016039
VERSION AR016039.1 GI:3972316
KEYWORDS
SOURCE
ORGANISM
REFERENCE 1 (bases 1 to 20)
AUTHORS Villeponteau, B., Feng, J., Funk, W. and Andrews, W.H.
TITLE Assays for the DNA component of human telomerase
JOURNAL Patent: US 5776679-A 7 07-JUL-1998;
FEATURES
Location/Qualifiers

COMMENT      PN  JP 2001509681-A/3
PD 24-JUL-2001
PF 04-APR-1997 JP 1998542718
PI SCOTT L WEINRICH, EDWARD M ATKINSON III, SERGE P LICHTSTEINER,
PI ALAIN P VASSEROT, RONALD A PRUZAN, JAMES T KEALEY PC
C12N15/54, C12N9/12, C07K16/40, C12Q1/68, C07K14/47 CC Strandedness:
Single;
CC Topology: Linear;
CC /mod_base= OTHER;
CC /note= 'N = biotinylated C'
CC /note= 'oligonucleotide P3'
FH Key Location/Qualifiers
FT modified base 1.

FEATURES
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/organism="Zea mays"
/mol_type="genomic DNA"
/db_xref="taxon:4577"

Query Match
Best Local Similarity 4.7%; Score 21; DB 1; Length 22;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 46 CTAACCCCTAACTGAGAAGGC 66
|||||
Db 22 CTAACCCCTAACTGAGAAGGC 2

RESULT 157
A84604/c
LOCUS A84604 20 bp DNA linear PAT 21-JAN-2000
DEFINITION Sequence 14 from Patent WO9845450.
ACCESSION A84604
VERSION A84604.1 GI:6733517
KEYWORDS
SOURCE
ORGANISM
REFERENCE 1 (bases 1 to 20)
AUTHORS Atkinson, E.M. and Kealey, J.T.
TITLE PURIFIED TELOMERASE
JOURNAL Patent: WO 9845450-A 14 15-OCT-1998;
GERON CORP (US)
FEATURES
source
1..20
/organism="unidentified"
/mol_type="unassigned DNA"
/db_xref="taxon:32644"

Query Match
Best Local Similarity 4.4%; Score 20; DB 1; Length 20;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 361 AGCGCCGAGGAGGAGGACG 380
|||||
Db 20 AGCGCCGAGGAGGAGGACG 1

RESULT 158
AR016039/c
LOCUS AR016039 20 bp DNA linear PAT 05-DEC-1998
DEFINITION Sequence 7 from patent US 5776679.
ACCESSION AR016039
VERSION AR016039.1 GI:3972316
KEYWORDS
SOURCE
ORGANISM
REFERENCE 1 (bases 1 to 20)
AUTHORS Villeponteau, B., Feng, J., Funk, W. and Andrews, W.H.
TITLE Assays for the DNA component of human telomerase
JOURNAL Patent: US 5776679-A 7 07-JUL-1998;
FEATURES
Location/Qualifiers

source
1..20
/organism="unknown"
/mol_type="unassigned DNA"

Query Match
Best Local Similarity 4.4%; Score 20; DB 1; Length 20;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2 GGTTCGGAGGCTGGGCCTG 21
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Db 20 GGTTCGGAGGCTGGGCCTG 1

RESULT 159
AR059200/c
LOCUS AR059200 20 bp DNA linear PAT 29-SEP-1999
DEFINITION Sequence 7 from patent US 5837857.
ACCESSION AR059200
VERSION AR059200.1 GI:5984777
KEYWORDS
SOURCE
ORGANISM
REFERENCE 1 (bases 1 to 20)
AUTHORS Villeponteau, B., Feng, J., Funk, W. and Andrews, W.H.
TITLE Mammalian telomerase
JOURNAL Patent: US 5837857-A 7 17-NOV-1998;
FEATURES
source
1..20
/organism="unknown"
/mol_type="unassigned DNA"

Query Match
Best Local Similarity 4.4%; Score 20; DB 1; Length 20;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2 GGTTCGGAGGCTGGGCCTG 21
|||||
Db 20 GGTTCGGAGGCTGGGCCTG 1

RESULT 160
AR059219/c
LOCUS AR059219 20 bp DNA linear PAT 29-SEP-1999
DEFINITION Sequence 26 from patent US 5837857.
ACCESSION AR059219
VERSION AR059219.1 GI:5984796
KEYWORDS
SOURCE
ORGANISM
REFERENCE 1 (bases 1 to 20)
AUTHORS Villeponteau, B., Feng, J., Funk, W. and Andrews, W.H.
TITLE Mammalian telomerase
JOURNAL Patent: US 5837857-A 26 17-NOV-1998;
FEATURES
source
1..20
/organism="unknown"
/mol_type="unassigned DNA"

Query Match
Best Local Similarity 4.4%; Score 20; DB 1; Length 20;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 41 TTGTGCTAACCCCTAACTGAG 60
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Db 20 TTGTGCTAACCCCTAACTGAG 1

RESULT 161
AR059222/c
LOCUS AR059222 20 bp DNA linear PAT 29-SEP-1999
DEFINITION Sequence 29 from patent US 5837857.
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ACCESSION AR059222  
VERSION AR059222.1 GI:5984799  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unclassified.  
REFERENCE 1 (bases 1 to 20)  
AUTHORS Villeponteau,B., Feng,J., Funk,W. and Andrews,W.H.  
TITLE Mammalian telomerase  
JOURNAL Patent: US 5837857-A 29 17-NOV-1998;  
FEATURES Location/Qualifiers  
source 1..20  
/organism="unknown"  
/mol\_type="unassigned DNA"  
Query Match 4.4%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.1e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Qy 2 GGTTCGGAGGCTGGCCTG 21  
Db 20 GGTTCGGAGGCTGGCCTG 1  
RESULT 162  
AR063827/c  
LOCUS AR063827 20 bp DNA linear PAT 29-SEP-1999  
DEFINITION Sequence 3 from patent US 5846723.  
ACCESSION AR063827  
VERSION AR063827.1 GI:5993135  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unclassified.  
REFERENCE 1 (bases 1 to 20)  
AUTHORS Kim,N.Woo., Wu,F., Kealey,J.T., Pruzan,R. and Weinrich,S.L.  
TITLE Methods for detecting the RNA component of telomerase  
JOURNAL Patent: US 5846723-A 3 08-DEC-1998;  
FEATURES Location/Qualifiers  
source 1..20  
/organism="unknown"  
/mol\_type="unassigned DNA"  
Query Match 4.4%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.1e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Qy 361 AGGCCGCGAGGAGGAAACG 380  
Db 20 AGGCCGCGAGGAGGAAACG 1  
RESULT 163  
AR063830/c  
LOCUS AR063830 20 bp DNA linear PAT 29-SEP-1999  
DEFINITION Sequence 6 from patent US 5846723.  
ACCESSION AR063830  
VERSION AR063830.1 GI:5993138  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unclassified.  
REFERENCE 1 (bases 1 to 20)  
AUTHORS Kim,N.Woo., Wu,F., Kealey,J.T., Pruzan,R. and Weinrich,S.L.  
TITLE Methods for detecting the RNA component of telomerase  
JOURNAL Patent: US 5846723-A 6 08-DEC-1998;  
FEATURES Location/Qualifiers  
source 1..20  
/organism="unknown"  
/mol\_type="unassigned DNA"  
Query Match 4.4%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.1e+02;

Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Qy 300 GAAGAGTTGGCTCTGTCTCAG 319  
Db 20 GAAGAGTTGGCTCTGTCTCAG 1  
RESULT 164  
AR063831/c  
LOCUS AR063831 20 bp DNA linear PAT 29-SEP-1999  
DEFINITION Sequence 7 from patent US 5846723.  
ACCESSION AR063831  
VERSION AR063831.1 GI:5993139  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unclassified.  
REFERENCE 1 (bases 1 to 20)  
AUTHORS Kim,N.Woo., Wu,F., Kealey,J.T., Pruzan,R. and Weinrich,S.L.  
TITLE Methods for detecting the RNA component of telomerase  
JOURNAL Patent: US 5846723-A 7 08-DEC-1998;  
FEATURES Location/Qualifiers  
source 1..20  
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/mol\_type="unassigned DNA"  
Query Match 4.4%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.1e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Qy 290 CTGCCACCGCGAAGAGTTGG 309  
Db 20 CTGCCACCGCGAAGAGTTGG 1  
RESULT 165  
AR063837/c  
LOCUS AR063837 20 bp DNA linear PAT 29-SEP-1999  
DEFINITION Sequence 13 from patent US 5846723.  
ACCESSION AR063837  
VERSION AR063837.1 GI:5993145  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unclassified.  
REFERENCE 1 (bases 1 to 20)  
AUTHORS Kim,N.Woo., Wu,F., Kealey,J.T., Pruzan,R. and Weinrich,S.L.  
TITLE Methods for detecting the RNA component of telomerase  
JOURNAL Patent: US 5846723-A 13 08-DEC-1998;  
FEATURES Location/Qualifiers  
source 1..20  
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/mol\_type="unassigned DNA"  
Query Match 4.4%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.1e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Qy 159 TCTAGAGCAAAACAAAAATG 178  
Db 20 TCTAGAGCAAAACAAAAATG 1  
RESULT 166  
AR075511/c  
LOCUS AR075511 20 bp DNA linear PAT 30-AUG-2000  
DEFINITION Sequence 8 from patent US 5958680.  
ACCESSION AR075511  
VERSION AR075511.1 GI:10002261  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unclassified.

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REFERENCE 1 (bases 1 to 20)
AUTHORS Villeponteau,B., Feng,J., Funk,W. and Andrews,W.H.
TITLE Mammalian telomerase
JOURNAL Patent: US 5958680-A 8 28-SEP-1999;
FEATURES
    source
        Location/Qualifiers
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            /organism="unknown"
            /mol_type="unassigned DNA"
Query Match 4.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.1e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2 GGTTCGGAGGTGGGCCTG 21
|||||
Db 20 GGTTCGGAGGTGGGCCTG 1

RESULT 167
AR075544/c
LOCUS AR075544 20 bp DNA linear PAT 30-AUG-2000
DEFINITION Sequence 41 from patent US 5958680.
ACCESSION AR075544
VERSION AR075544.1 GI:10002290
KEYWORDS
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 20)
AUTHORS Villeponteau,B., Feng,J., Funk,W. and Andrews,W.H.
TITLE Mammalian telomerase
JOURNAL Patent: US 5958680-A 41 28-SEP-1999;
FEATURES
    source
        Location/Qualifiers
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            /organism="unknown"
            /mol_type="unassigned DNA"
Query Match 4.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.1e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 41 TTGTCTAACCTTAACCTGAG 60
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Db 20 TTGTCTAACCTTAACCTGAG 1

RESULT 168
AR079894/c
LOCUS AR079894 20 bp DNA linear PAT 31-AUG-2000
DEFINITION Sequence 7 from patent US 5968506.
ACCESSION AR079894
VERSION AR079894.1 GI:10006647
KEYWORDS
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 20)
AUTHORS Weinrich,S.L., Atkinson,E.M. III, Lichtsteiner,S.P., Vasserot,A.P.,
Pruzan,R.A. and Kealey,J.T.
TITLE Purified telomerase
JOURNAL Patent: US 5968506-A 7 19-OCT-1999;
FEATURES
    source
        Location/Qualifiers
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            /organism="unknown"
            /mol_type="unassigned DNA"
Query Match 4.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.1e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 361 AGCCCGCAGGAGGAGAACG 380
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Db 20 AGCCCGCAGGAGGAGAACG 1

RESULT 169
AR161909/c
LOCUS AR161909 20 bp DNA linear PAT 17-OCT-2001
DEFINITION Sequence 7 from patent US 6258535.
ACCESSION AR161909
VERSION AR161909.1 GI:16228923
KEYWORDS
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 20)
AUTHORS Villeponteau,B., Feng,J., Funk,W. and Andrews,W.H.
TITLE Mammalian telomerase
JOURNAL Patent: US 6258535-A 7 10-JUL-2001;
FEATURES
    source
        Location/Qualifiers
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            /mol_type="unassigned DNA"
Query Match 4.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.1e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2 GGTTCGGAGGTGGGCCTG 21
|||||
Db 20 GGTTCGGAGGTGGGCCTG 1

RESULT 170
BD176149/c
LOCUS BD176149 20 bp DNA linear PAT 18-MAR-2003
DEFINITION Mammalian telomerase.
ACCESSION BD176149
VERSION BD176149.1 GI:29121853
KEYWORDS
SOURCE unidentified
ORGANISM unidentified
REFERENCE 1 (bases 1 to 20)
AUTHORS Villeponteau,B., Feng,J., Funk,W. and Andrews,W.H.
TITLE Mammalian telomerase
JOURNAL Patent: JP 2002272489-A 8 24-SEP-2002;
COMMENT
    OS Unidentified
    EN JP 2002272489-A/8
    ED 24-SEP-2002
    PF 06-MAR-2002 JP 2002061125
    PR 07-JUL-1994 US 08/272102,27-OCT-1994 US 08/330123 PR
    07-JUN-1995 US 08/472802,07-JUN-1995 US 08/482115 PI BRYANT
    VILLEPONTEAU,JUNLI FENG,WALTER FUNK,WILLIAM H ANDREWS PC
    C12N15/09,C12N9/99,C12Q1/68,G01N33/53,G01N33/566,C12N15/00 CC
    Strandedness: Single;
    CC Topology: Linear;
    CC Mammalian telomerase
    FH Key Location/Qualifiers
    FT source 1..20
    FT /organism='Unidentified'.
FEATURES
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            1..20
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            /mol_type="genomic DNA"
            /db_xref="taxon:32644"
Query Match 4.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.1e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 41 TTGTCTAACCTTAACCTGAG 60
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Db 20 TTGTCTAACCTTAACCTGAG 1
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RESULT 171
BD176152/c
LOCUS      BD176152      20 bp      DNA      linear      PAT 18-MAR-2003
DEFINITION Mammalian telomerase.
ACCESSION  BD176152
VERSION    BD176152.1 GI:29121856
KEYWORDS   JP 2002272489-A/11.
SOURCE     unidentified
ORGANISM   unidentified
            unclassified.
REFERENCE  1 (bases 1 to 20)
AUTHORS   Villeponteau,B., Feng,J., Funk,W. and Andrews,W.H.
TITLE     Mammalian telomerase
JOURNAL   Patent: JP 2002272489-A 11 24-SEP-2002;
          GERON CORP
COMMENT    OS Unidentified
          PN JP 2002272489-A/11
          PD 24-SEP-2002
          PF 06-MAR-2002 JP 2002061125
          PR 07-JUL-1994 US 08/272102,27-OCT-1994 US 08/330123 PR
             07-JUN-1995 US 08/472802,07-JUN-1995 US 08/482115 PI BRYANT
             VILLEPONTEAU JUNLI FENG, WALTER FUNK WILLIAM H ANDREWS PC
             C12N15/09, C12N9/99, C12Q1/68, G01N33/53, G01N33/566, C12N15/00 CC
Strandedness: Single;
CC Topology: Linear;
CC Mammalian telomerase
FH Key 1..20 Location/Qualifiers
FT source
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    Location/Qualifiers
    1..20
    /organism="Unidentified".
    /mol_type="genomic DNA"
    /db_xref="taxon:32644"
Query Match 4.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.1e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 2 GGTTCGGAGGGTGGGCTG 21
Dy 20 GGTTCGGAGGGTGGGCTG 1
RESULT 172
BD225812
LOCUS      BD225812      20 bp      DNA      linear      PAT 17-JUL-2003
DEFINITION Promoter region of mouse and human telomerase RNA component genes.
ACCESSION  BD225812
VERSION    BD225812.1 GI:33035582
KEYWORDS   JP 2002509699-A/15.
SOURCE     synthetic construct
ORGANISM   synthetic construct
            other sequences; artificial sequences.
REFERENCE  1 (bases 1 to 20)
AUTHORS   Keith,W.N.
TITLE     Promoter region of mouse and human telomerase RNA component genes
JOURNAL   Patent: JP 2002509699-A 15 02-APR-2002;
          CANCER RESEARCH CAMPAIGN TECHNOLOGY LTD
COMMENT    OS Artificial Sequence
          PN JP 2002509699-A/15
          PD 02-APR-2002
          PF 29-JAN-1999 JP 2000529424
          PR 29-JAN-1998 GB 9801902.9
          PI WILLIAM NICOL KEITH
          PC C12N15/09, A61K31/7105, A61K31/711, A61K35/76, A61K38/00, A61K45/00, PC
             A61K48/00,
             PC A61P35/00, C12N1/15, C12N1/19, C12N1/21, C12N5/10, C12P21/02 PC
             , C12Q1/68/ C12N9/12,
             PC (A61K35/76, A61K31:522), C12N15/00, A61K37/02, C12N5/00 CC
             Description of Artificial Sequence:Oligonucleotide FH Key
FH Key 1..20 Location/Qualifiers
FT source
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    1..20
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    /mol_type="genomic DNA"
    /db_xref="taxon:32630"
Query Match 4.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.1e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 17 GCCTGGAGGGGTGGTGCC 36
Dy 1 GCCTGGAGGGGTGGTGCC 20
RESULT 174
I31751/c
LOCUS      I31751      20 bp      DNA      linear      PAT 06-FEB-1997
DEFINITION Sequence 4 from patent US 5583016.
ACCESSION  I31751
VERSION    I31751.1 GI:1822542
KEYWORDS   .
SOURCE     Unknown.
ORGANISM   Unknown.
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AUTHORS Keith, W.N.  
 TITLE Promoter regions of the mouse and human telomerase rna component genes  
 JOURNAL Patent: WO 9938964-A 45 05-AUG-1999;  
 KEITH WILLIAM NICOL (GB); CANCER RES CAMPAIGN TECH (GB)  
 FEATURES Location/Qualifiers  
 source 1..20  
 /organism="synthetic construct"  
 /mol\_type="unassigned DNA"  
 /db\_xref="taxon:32630"  
 /note="Oligonucleotide"

Query Match 4.4%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 1.1e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 17 GCCTGGGAGGGTGTGGCC 36  
 |||||  
 Db 1 GCCTGGGAGGGTGTGGCC 20  
 |||||

RESULT 180  
 AX058271 20 bp DNA linear PAT 17-JAN-2001  
 LOCUS Sequence 6 from Patent WO0074667.  
 DEFINITION AX058271  
 ACCESSION AX058271.1 GI:12310770  
 VERSION  
 KEYWORDS synthetic construct  
 SOURCE synthetic construct  
 ORGANISM other sequences; artificial sequences.  
 1  
 REFERENCE Au, J.L. and Wientjes, G.  
 AUTHORS Compositions active in telomere damage comprising a taxane and  
 TITLE telomerase inhibitor  
 JOURNAL Patent: WO 0074667-A 6 14-DEC-2000;  
 Au, Jessie L.S. (US); Wientjes, Guillaume (US)  
 FEATURES Location/Qualifiers  
 source 1..20  
 /organism="synthetic construct"  
 /mol\_type="unassigned DNA"  
 /db\_xref="taxon:32630"  
 /note="primer/probe"

Query Match 4.4%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 1.1e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 GGGTTGCGAGGGTGGGCCT 20  
 |||||  
 Db 1 GGGTTGCGAGGGTGGGCCT 20  
 |||||

RESULT 181  
 BD023699/c 20 bp DNA linear PAT 27-AUG-2002  
 LOCUS Method for detecting and inhibiting RNA component of telomerase.  
 DEFINITION BD023699  
 ACCESSION BD023699  
 VERSION BD023699.1 GI:22564922  
 KEYWORDS JP 2001507229-A/3.  
 SOURCE unidentified  
 ORGANISM unclassified.  
 1 (bases 1 to 20)  
 REFERENCE Kim, N.W., Wu, F., Kealey, J.T., Pruzan, R. and Weinrich, S.L.  
 AUTHORS Method for detecting and inhibiting RNA component of telomerase  
 TITLE Patent: JP 2001507229-A 3 05-JUN-2001;  
 JOURNAL GERON CORP  
 COMMENT PN JP 2001507229-A/3  
 PD 05-JUN-2001  
 PF 19-DEC-1997 JP 1998529003  
 PR 20-DEC-1996 US 08/770564, 20-DEC-1996 US 08/770565 PI  
 NAM WOO KIM, FRED WU, JAMES T KEALEY, RONALD PRUZAN, SCOTT L PI

WEINRICH  
 PC C12N15/09, A61K9/08, A61K31/7105, A61K45/00, A61K48/00, A61P35/00,  
 C12N5/10,  
 PC C12N9/12, C12Q1/68, C12Q1/68, C12N15/00, C12N5/00 CC  
 Strandedness: Single;  
 CC Topology: Linear;  
 CC /note= 'Oligo 14ab'  
 FH Key Location/Qualifiers.  
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 /organism="unidentified"  
 /mol\_type="genomic DNA"  
 /db\_xref="taxon:32644"

Query Match 4.4%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 1.1e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 361 AGGCCGCGAGGAGGACG 380  
 |||||  
 Db 20 AGGCCGCGAGGAGGACG 1  
 |||||

RESULT 182  
 BD023702/c 20 bp DNA linear PAT 27-AUG-2002  
 LOCUS Method for detecting and inhibiting RNA component of telomerase.  
 DEFINITION BD023702  
 ACCESSION BD023702  
 VERSION BD023702.1 GI:22564925  
 KEYWORDS JP 2001507229-A/6.  
 SOURCE unidentified  
 ORGANISM unclassified.  
 1 (bases 1 to 20)  
 REFERENCE Kim, N.W., Wu, F., Kealey, J.T., Pruzan, R. and Weinrich, S.L.  
 AUTHORS Method for detecting and inhibiting RNA component of telomerase  
 TITLE Patent: JP 2001507229-A 6 05-JUN-2001;  
 JOURNAL GERON CORP  
 COMMENT PN JP 2001507229-A/6  
 PD 05-JUN-2001  
 PF 19-DEC-1997 JP 1998529003  
 PR 20-DEC-1996 US 08/770564, 20-DEC-1996 US 08/770565 PI  
 NAM WOO KIM, FRED WU, JAMES T KEALEY, RONALD PRUZAN, SCOTT L PI  
 WEINRICH  
 PC C12N15/09, A61K9/08, A61K31/7105, A61K45/00, A61K48/00, A61P35/00,  
 C12N5/10,  
 PC C12N9/12, C12Q1/68, C12Q1/68, C12N15/00, C12N5/00 CC  
 Strandedness: Single;  
 CC Topology: Linear;  
 CC /note= 'Oligo 16ab'  
 FH Key Location/Qualifiers.  
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 /organism="unidentified"  
 /mol\_type="genomic DNA"  
 /db\_xref="taxon:32644"

Query Match 4.4%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 1.1e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 300 GAAGAGTTGGGCTCTGTCTCAG 319  
 |||||  
 Db 20 GAAGAGTTGGGCTCTGTCTCAG 1  
 |||||

RESULT 183  
 BD023703/c 20 bp DNA linear PAT 27-AUG-2002  
 LOCUS Method for detecting and inhibiting RNA component of telomerase.  
 DEFINITION BD023703  
 ACCESSION BD023703  
 VERSION BD023703.1 GI:22564926  
 KEYWORDS JP 2001507229-A/7.

SOURCE unidentified  
ORGANISM unclassified.  
REFERENCE 1 (bases 1 to 20)  
AUTHORS Kim,N.W., Wu,F., Kealey,J.T., Pruzan,R. and Weinrich,S.L.  
TITLE Method for detecting and inhibiting RNA component of telomerase  
JOURNAL Patent: JP 2001507229-A 7 05-JUN-2001;  
GERON CORP

COMMENT  
PN JP 2001507229-A/7  
PD 05-JUN-2001  
PF 19-DEC-1997 JP 1998529003  
PR 20-DEC-1996 US 08/770564,20-DEC-1996 US 08/770565 PI  
NAM WOO KIM,FRED WU,JAMES T KEALEY,RONALD PRUZAN,SCOTT L PI  
WEINRICH  
PC C12N15/09,A61K9/08,A61K31/7105,A61K45/00,A61K48/00,A61P35/00,  
PC C12N5/10,  
PC C12N9/12,C12Q1/68,C12Q1/68,C12N15/00,C12N5/00 CC  
Strandedness: Single;  
CC Topology: Linear;  
CC /note= 'oligo 16bc'  
FH Key Location/Qualifiers.  
source  
1..20  
/organism="unidentified"  
/mol\_type="genomic DNA"  
/db\_xref="taxon:32644"

Query Match 4.4%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.1e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 290 CTGCCACCGCAGAGTTGG 309  
Db 20 CTGCCACCGCAGAGTTGG 1

RESULT 184  
BD023709/c  
LOCUS 20 bp DNA linear PAT 27-AUG-2002  
DEFINITION Method for detecting and inhibiting RNA component of telomerase.  
ACCESSION BD023709  
VERSION BD023709.1 GI:22564932  
KEYWORDS JP 2001507229-A/13.  
SOURCE unidentified  
ORGANISM unclassified.  
REFERENCE 1 (bases 1 to 20)  
AUTHORS Kim,N.W., Wu,F., Kealey,J.T., Pruzan,R. and Weinrich,S.L.  
TITLE Method for detecting and inhibiting RNA component of telomerase  
JOURNAL Patent: JP 2001507229-A 13 05-JUN-2001;  
GERON CORP

COMMENT  
PN JP 2001507229-A/13  
PD 05-JUN-2001  
PF 19-DEC-1997 JP 1998529003  
PR 20-DEC-1996 US 08/770564,20-DEC-1996 US 08/770565 PI  
NAM WOO KIM,FRED WU,JAMES T KEALEY,RONALD PRUZAN,SCOTT L PI  
WEINRICH  
PC C12N15/09,A61K9/08,A61K31/7105,A61K45/00,A61K48/00,A61P35/00,  
PC C12N5/10,  
PC C12N9/12,C12Q1/68,C12Q1/68,C12N15/00,C12N5/00 CC  
Strandedness: Single;  
CC Topology: Linear;  
CC /note= 'oligo 20/21'  
FH Key Location/Qualifiers.  
source  
1..20  
/organism="unidentified"  
/mol\_type="genomic DNA"  
/db\_xref="taxon:32644"

Query Match 4.4%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.1e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 159 TCTAGAGCAACAAACAAATG 178  
Db 20 TCTAGAGCAACAAACAAATG 1

RESULT 185  
BD058142/c  
LOCUS 20 bp DNA linear PAT 27-AUG-2002  
DEFINITION Purified telomerase.  
ACCESSION BD058142  
VERSION BD058142.1 GI:22603748  
KEYWORDS JP 2001509681-A/11.  
SOURCE Zea mays  
ORGANISM Zea mays  
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;  
Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae; PACCAD  
clade; Panicoideae; Andropogoneae; Zea.  
REFERENCE 1 (bases 1 to 20)  
AUTHORS Weinrich,S.L., Iii,E.M.A., Lichtsteiner,S.P., Vasserot,A.P.,  
Pruzan,R.A. and Kealey,J.T.  
TITLE Purified telomerase  
JOURNAL Patent: JP 2001509681-A 11 24-JUL-2001;  
GERON CORP  
COMMENT  
PN JP 2001509681-A/11  
PD 24-JUL-2001  
PF 04-APR-1997 JP 1998542718  
PI SCOTT L WEINRICH,EDWARD M ATKINSON III,SERGE P LICHTSTEINER,  
PI ALAIN P VASSEROT,RONALD A PRUZAN,JAMES T KEALEY PC  
C12N15/54,C12N9/12,C07K16/40,C12Q1/68,C07K14/47 CC  
Strandedness: Single;  
CC Topology: Linear;  
CC /note= 'oligonucleotide 14ab'  
FH Key Location/Qualifiers.  
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/organism="Zea mays"  
/mol\_type="genomic DNA"  
/db\_xref="taxon:4577"

Query Match 4.4%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.1e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 361 AGGCCCGCAGAGGAGGACG 380  
Db 20 AGGCCCGCAGAGGAGGACG 1

RESULT 186  
BD071074/c  
LOCUS 20 bp DNA linear PAT 27-AUG-2002  
DEFINITION Modulation of mammalian telomerase by peptide nucleic acids.  
ACCESSION BD071074  
VERSION BD071074.1 GI:22616677  
KEYWORDS JP 2001517929-A/40.  
SOURCE unidentified  
ORGANISM unidentified  
REFERENCE 1 (bases 1 to 20)  
AUTHORS Shay,J.W., Wright,W.E., Piatyszek,M.A., Corey,D. and Norton,J.C.  
TITLE Modulation of mammalian telomerase by peptide nucleic acids  
JOURNAL Patent: JP 2001517929-A 40 09-OCT-2001;  
GERON CORP

COMMENT  
OS Unidentified  
PN JP 2001517929-A/40  
PD 09-OCT-2001  
PF 09-APR-1997 JP 1997536487  
PR 09-APR-1996 US 08/630019  
PI JERRY W SHAY,WOODRING E WRIGHT,MIECZYSLAW A PIATYSZEK,DAVID  
PI COREY,  
PI JAMES C NORTON  
PC C07K14/00,A61K38/16,C12Q1/68



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CC Strandedness: Single;
CC Topology: Linear;
CC /desc = 'peptide nucleic acid (PNA), where (deoxy(ribose- CC
phosphate
CC linkages are replaced by N-(2-aminoethyl)glycine units linked
to
CC nucleotide bases via glycine amino N through a CC
methylenecarbonyl linker'
FH Key Location/Qualifiers
FT source 1..20
/organism='Unidentified'.
FEATURES
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1..20
/organism='unidentified'
/mol_type='genomic DNA'
/db_xref='taxon:32644'

Query Match 4.2%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.1e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 46 CTAACCCCTAACTGAGAGGG 65
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Db 20 CTAACCCCTAACTGAGAGGG 1

RESULT 187
AR063833/c
LOCUS 19 bp DNA linear PAT 29-SEP-1999
DEFINITION Sequence 9 from patent US 5846723.
ACCESSION AR063833
VERSION AR063833.1 GI:5993141
KEYWORDS Unknown.
ORGANISM Unknown.
REFERENCE 1 (bases 1 to 19)
AUTHORS Kim,N.Woo., Wu,F., Kealey,J.T., Pruzan,R. and Weinrich,S.L.
TITLE Methods for detecting the RNA component of telomerase
JOURNAL Patent: US 5846723-A 9 08-DEC-1998;
LOCATION/Qualifiers
source 1..19
/organism='unknown'
/mol_type='unassigned DNA'

Query Match 4.2%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 1.2e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 148 CCACCGTTTCATTCTAGAGC 166
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Db 19 CCACCGTTTCATTCTAGAGC 1

RESULT 188
AR241175/c
LOCUS 19 bp DNA linear PAT 20-DEC-2002
DEFINITION Sequence 2 from patent US 6468983.
ACCESSION AR241175
VERSION AR241175.1 GI:27286405
KEYWORDS Unknown.
ORGANISM Unknown.
REFERENCE 1 (bases 1 to 19)
AUTHORS Silverman,R.H., Kondo,S., Cowell,J.K., Li,G. and Torrence,P.F.
TITLE RNase L activators and antisense oligonucleotides effective to
treat telomerase-expressing malignancies
JOURNAL Patent: US 6468983-A 2 22-OCT-2002;
LOCATION/Qualifiers
source 1..19
/organism='unknown'
/mol_type='genomic DNA'
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Query Match 4.2%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 1.2e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 76 GTGCTTTTGCTCCCGCGC 94
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Db 19 GTGCTTTTGCTCCCGCGC 1

RESULT 189
BD023705/c
LOCUS 19 bp DNA linear PAT 27-AUG-2002
DEFINITION Method for detecting and inhibiting RNA component of telomerase.
ACCESSION BD023705
VERSION BD023705.1 GI:22564928
KEYWORDS JP 2001507229-A/9.
SOURCE unidentified
ORGANISM unclassified.
REFERENCE 1 (bases 1 to 19)
AUTHORS Kim,N.W., Wu,F., Kealey,J.T., Pruzan,R. and Weinrich,S.L.
TITLE Method for detecting and inhibiting RNA component of telomerase
JOURNAL Patent: JP 2001507229-A 9 05-JUN-2001;
GERON CORP
COMMENT PN JP 2001507229-A/9
PD 05-JUN-2001
PF 19-DEC-1997 JP 1998529003
PR 20-DEC-1996 US 08/770564,20-DEC-1996 US 08/770565 PI
NAM WOO KIM,FRED WU,JAMES T KEALEY,RONALD PRUZAN,SCOTT L PI
WEINRICH
PC C12N15/09,A61K9/08,A61K31/7105,A61K45/00,A61K48/00,A61P35/00,
PC C12N5/10,
PC C12N9/12,C12Q1/68,C12Q1/68,C12N15/00,C12N5/00 CC
Strandedness: Single;
CC Topology: Linear;
CC /note= 'oligo 21ab'
FH Key Location/Qualifiers
source 1..19
/organism='unidentified'
/mol_type='genomic DNA'
/db_xref='taxon:32644'

Query Match 4.2%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 1.2e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 148 CCACCGTTTCATTCTAGAGC 166
|||||
Db 19 CCACCGTTTCATTCTAGAGC 1

RESULT 190
BD071093
LOCUS 19 bp RNA linear PAT 27-AUG-2002
DEFINITION Modulation of mammalian telomerase by peptide nucleic acids.
ACCESSION BD071093
VERSION BD071093.1 GI:22616696
KEYWORDS JP 2001517929-A/59.
SOURCE unidentified
ORGANISM unclassified.
REFERENCE 1 (bases 1 to 19)
AUTHORS Shay,J.W., Wright,W.E., Piatyazek,M.A., Corey,D. and Norton,J.C.
TITLE Modulation of mammalian telomerase by peptide nucleic acids
JOURNAL Patent: JP 2001517929-A 59 09-OCT-2001;
GERON CORP
COMMENT OS Unidentified
PN JP 2001517929-A/59
PD 09-OCT-2001
PF 09-APR-1997 JP 1997536487
PR 09-APR-1996 US 08/630019
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PI JERRY W SHAY, WOODRING E WRIGHT, MIECZYSLAW A PIATYSZEK, DAVID  
PI COREY,  
PI JAMES C NORTON  
PC C07K14/00, A61K38/16, C12Q1/68  
CC Strandedness: Single;  
CC Topology: Linear;  
CC Modulation of mammalian telomerase by peptide nucleic acids FH  
Key Location/Qualifiers  
FT source 1..19  
FT Location/Qualifiers  
FEATURES  
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/organism="unidentified"  
/mol\_type="genomic RNA"  
/db\_xref="taxon:32644"  
Query Match 4.2%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 1.2e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 44 GTCTAACCCCTAACTGAGAA 62  
Db 1 GTCTAACCCCTAACTGAGAA 19  
RESULT 191  
BD084638/c  
LOCUS  
DEFINITION  
Rhase L activators and antisense oligonucleotides effective to  
treat telomerase-expressing malignancies.  
ACCESSION  
BD084638  
VERSION  
BD084638.1 GI:22630248  
KEYWORDS  
JP 2001524100-A/2.  
SOURCE  
synthetic construct  
ORGANISM  
other sequences; artificial sequences.  
REFERENCE  
1 (bases 1 to 19)  
Silverman, R.H., Kondo, S., Cowell, J.K., Li, G. and Torrence, P.F.  
AUTHORS  
Rhase L activators and antisense oligonucleotides effective to  
treat telomerase-expressing malignancies  
TITLE  
Patent: JP 2001524100-A 2 27-NOV-2001;  
JOURNAL  
THE CLEVELAND CLINIC FOUNDATION, NATIONAL INSTITUTES OF HEALTH  
COMMENT  
OS Artificial Sequence  
PN JP 2001524100-A/2  
PD 27-NOV-2001  
PF 13-APR-1998 JP 1998546125  
PR 21-APR-1997 US 60/044507, 03-FEB-1998 US 09/018125 PI  
ROBERT H SILVERMAN, SEIJI KONDO, JOHN K COWELL, GUIYING LI, PAUL F  
PI TORRENCE  
PC C07H21/00, C07H21/02, C12Q1/68, A61K48/00  
CC Description of Artificial Sequence: oligonucleotide FH Key  
FT source 1..19  
FT Location/Qualifiers  
FEATURES  
source 1..19  
/organism="Artificial Sequence".  
/organism="synthetic construct"  
/mol\_type="genomic DNA"  
/db\_xref="taxon:32630"  
Query Match 4.2%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 1.2e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 76 GTGCTTTTGTCTCCCGCGC 94  
Db 19 GTGCTTTTGTCTCCCGCGC 1  
RESULT 192  
A84597/c  
LOCUS  
DEFINITION  
Sequence 7 from Patent WO9845450.  
PI JERRY W SHAY, WOODRING E WRIGHT, MIECZYSLAW A PIATYSZEK, DAVID  
PI COREY,  
PI JAMES C NORTON  
PC C07K14/00, A61K38/16, C12Q1/68  
CC Strandedness: Single;  
CC Topology: Linear;  
CC Modulation of mammalian telomerase by peptide nucleic acids FH  
Key Location/Qualifiers  
FT source 1..19  
FT Location/Qualifiers  
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/organism="Unidentified".  
/organism="unidentified"  
/mol\_type="genomic RNA"  
/db\_xref="taxon:32644"  
Query Match 4.2%; Score 19; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.3e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 361 AGGCCGCGAGGAGGAAC 379  
Db 20 AGGCCGCGAGGAGGAAC 2  
RESULT 193  
AR079898/c  
LOCUS  
DEFINITION  
Sequence 14 from patent US 5968506.  
ACCESSION  
AR079898  
VERSION  
AR079898.1 GI:10006651  
KEYWORDS  
Unknown.  
SOURCE  
Unknown.  
ORGANISM  
Unclassified.  
REFERENCE  
1 (bases 1 to 20)  
Weinrich, S.L., Atkinson, E.M. III, Lichtsteiner, S.P., Vasserot, A.P.,  
AUTHORS  
Pruzan, R.A. and Kealey, J.T.  
TITLE  
Purified telomerase  
JOURNAL  
Patent: US 5968506-A 14 19-OCT-1999;  
FEATURES  
Location/Qualifiers  
source 1..20  
/organism="unknown"  
/mol\_type="unassigned DNA"  
Query Match 4.2%; Score 19; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.3e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 361 AGGCCGCGAGGAGGAAC 379  
Db 20 AGGCCGCGAGGAGGAAC 2  
RESULT 194  
BD058138/c  
LOCUS  
DEFINITION  
Purified telomerase.  
ACCESSION  
BD058138  
VERSION  
BD058138.1 GI:22603744  
KEYWORDS  
JP 2001509681-A/7.  
SOURCE  
Zea mays  
ORGANISM  
Zea mays  
REFERENCE  
1 (bases 1 to 20)  
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;  
Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae; PACCAD  
clade; Panicoideae; Andropogoneae; Zea.  
AUTHORS  
Weinrich, S.L., Iii, E.M.A., Lichtsteiner, S.P., Vasserot, A.P.,  
Pruzan, R.A. and Kealey, J.T.

```

TITLE      Purified telomerase
JOURNAL    Patent: JP 2001509681-A 7 24-JUL-2001;
COMMENT    GERON CORP
PN         JP 2001509681-A/7
PF         24-JUL-2001
PI         04-APR-1997 JP 1998542718
PI         SCOTT L WEINRICH, EDWARD M ATKINSON III, SERGE P LICHTSTEINER,
PI         ALAIN P VASEROT, RONALD A PRUZAN, JAMES T KEALEY PC
C12N15/54,C12N9/12,C07K16/40,C12Q1/68,C07K14/47 CC Strandedness:
Single;
CC         Topology: Linear;
CC         /mod_base= OTHER;
CC         /note= 'N = biotinylated C'
CC         /note= 'oligonucleotide 14ab'
FH         Key
FT         modified base 1.
          Location/Qualifiers
FEATURES   source
            1..20
            /organism='Zea mays'
            /mol_type='genomic DNA'
            /db_xref='taxon:4577'

Query Match      4.2%; Score 19; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.3e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 361 AGGCCGAGGAGGAGGAGAC 379
      |||||
Db 20 AGGCCGAGGAGGAGGAGAC 2

RESULT 195
BD225846
LOCUS      BD225846                22 bp DNA linear PAT 17-JUL-2003
DEFINITION Promoter region of mouse and human telomerase RNA component genes.
ACCESSION  BD225846
VERSION     BD225846.1 GI:33035616
KEYWORDS    synthetic construct
SOURCE      synthetic construct
ORGANISM    other sequences; artificial sequences.
REFERENCE   1 (bases 1 to 22)
AUTHORS     Keith,W.N.
TITLE       Promoter region of mouse and human telomerase RNA component genes
JOURNAL     Patent: JP 2002509699-A 49 02-APR-2002;
            CANCER RESEARCH CAMPAIGN TECHNOLOGY LTD
COMMENT     OS Artificial Sequence
            PN JP 2002509699-A/49
            PD 02-APR-2002
            PF 29-JAN-1999 JP 2000529424
            PR 29-JAN-1998 GB 9801902.9
            PI WILLIAM NICOL KEITH
            PC C12N15/09,A61K31/7105,A61K35/76,A61K38/00,A61K45/00, PC
            A61K48/00,
            PC A61P35/00,C12N1/15,C12N1/19,C12N1/21,C12N5/10,C12P21/02 PC
            ,C12Q1/68//C12N9/12,
            PC A61K35/76,A61K31:522,C12N15/00,A61K37/02,C12N5/00 CC
            Description of Artificial Sequence:Oligonucleotide FH Key
            Location/Qualifiers
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            FT      Location/Qualifiers
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            /organism='synthetic construct'
            /mol_type='genomic DNA'
            /db_xref='taxon:32630'

Query Match      4.2%; Score 18.8; DB 1; Length 22;
Best Local Similarity 90.9%; Pred. No. 1.5e+02;
Matches 20; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 15 GGGCCTGGGAGGGGTGATGCC 36
      |||||
Db 1 GGGCCTGGGAGGGGTGATGCC 22

RESULT 197
BD225828/c
LOCUS      BD225828/c            20 bp DNA linear PAT 17-JUL-2003
DEFINITION Promoter region of mouse and human telomerase RNA component genes.
ACCESSION  BD225828
VERSION     BD225828.1 GI:33035598
KEYWORDS    synthetic construct
SOURCE      synthetic construct
ORGANISM    other sequences; artificial sequences.
REFERENCE   1 (bases 1 to 20)
AUTHORS     Keith,W.N.
TITLE       Promoter region of mouse and human telomerase RNA component genes
JOURNAL     Patent: JP 2002509699-A 31 02-APR-2002;
            CANCER RESEARCH CAMPAIGN TECHNOLOGY LTD
COMMENT     OS Artificial Sequence
            PN JP 2002509699-A/31
            PD 02-APR-2002
            PF 29-JAN-1999 JP 2000529424
            PR 29-JAN-1998 GB 9801902.9
            PI WILLIAM NICOL KEITH
            PC C12N15/09,A61K31/7105,A61K35/76,A61K38/00,A61K45/00, PC
            A61K48/00,
            PC A61P35/00,C12N1/15,C12N1/19,C12N1/21,C12N5/10,C12P21/02 PC
            ,C12Q1/68//C12N9/12,
            PC A61K35/76,A61K31:522,C12N15/00,A61K37/02,C12N5/00 CC
            Description of Artificial Sequence: Primer
            Location/Qualifiers
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            /organism='Artificial Sequence'.
            FT      Location/Qualifiers
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            /organism='synthetic construct'
            /mol_type='genomic DNA'
            /db_xref='taxon:32630'

Query Match      4.2%; Score 18.8; DB 1; Length 22;
Best Local Similarity 90.9%; Pred. No. 1.5e+02;
Matches 20; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 15 GGGCCTGGGAGGGGTGATGCC 36
      |||||
Db 1 GGGCCTGGGAGGGGTGATGCC 22

RESULT 196
AX019595
LOCUS      AX019595                22 bp DNA linear PAT 07-SEP-2000
DEFINITION Sequence 49 from Patent WO9938964.
ACCESSION  AX019595
VERSION     AX019595.1 GI:10043509
KEYWORDS    synthetic construct
SOURCE      synthetic construct
ORGANISM    other sequences; artificial sequences.
REFERENCE   1
AUTHORS     Keith,W.N.
TITLE       Promoter regions of the mouse and human telomerase rna component
            genes
JOURNAL     Patent: WO 9938964-A 49 05-AUG-1999;
            KEITH WILLIAM NICOL (GB); CANCER RES CAMPAIGN TECH (GB)
            Location/Qualifiers
FEATURES   source
            1..22
            /organism='synthetic construct'
            /mol_type='unassigned DNA'
            /db_xref='taxon:32630'
            /note='Oligonucleotide'

Query Match      4.2%; Score 18.8; DB 1; Length 22;
Best Local Similarity 90.9%; Pred. No. 1.5e+02;
Matches 20; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 15 GGGCCTGGGAGGGGTGATGCC 36
      |||||
Db 1 GGGCCTGGGAGGGGTGATGCC 22

RESULT 197
BD225828/c
LOCUS      BD225828/c            20 bp DNA linear PAT 17-JUL-2003
DEFINITION Promoter region of mouse and human telomerase RNA component genes.
ACCESSION  BD225828
VERSION     BD225828.1 GI:33035598
KEYWORDS    synthetic construct
SOURCE      synthetic construct
ORGANISM    other sequences; artificial sequences.
REFERENCE   1 (bases 1 to 20)
AUTHORS     Keith,W.N.
TITLE       Promoter region of mouse and human telomerase RNA component genes
JOURNAL     Patent: JP 2002509699-A 31 02-APR-2002;
            CANCER RESEARCH CAMPAIGN TECHNOLOGY LTD
COMMENT     OS Artificial Sequence
            PN JP 2002509699-A/31
            PD 02-APR-2002
            PF 29-JAN-1999 JP 2000529424
            PR 29-JAN-1998 GB 9801902.9
            PI WILLIAM NICOL KEITH
            PC C12N15/09,A61K31/7105,A61K35/76,A61K38/00,A61K45/00, PC
            A61K48/00,
            PC A61P35/00,C12N1/15,C12N1/19,C12N1/21,C12N5/10,C12P21/02 PC
            ,C12Q1/68//C12N9/12,
            PC A61K35/76,A61K31:522,C12N15/00,A61K37/02,C12N5/00 CC
            Description of Artificial Sequence: Primer
            Location/Qualifiers
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            /organism='Artificial Sequence'.
            FT      Location/Qualifiers
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            /organism='synthetic construct'
            /mol_type='genomic DNA'
            /db_xref='taxon:32630'
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Query Match      4.1%; Score 18.4; DB 1; Length 20;
Best Local Similarity 95.0%; Pred. No. 1.4e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 102 TTCTCGCTGACTTTCAGCGG 121
Db 20 TTCTCGCTGACTTTCAGCGG 1

RESULT 198
BD225831/c
LOCUS AX019577/c
DEFINITION Promoter region of mouse and human telomerase RNA component genes.
ACCESSION BD225831
VERSION JP 2002509699-A/34.
KEYWORDS synthetic construct
SOURCE other sequences; artificial sequences.
ORGANISM
REFERENCE 1 (bases 1 to 20)
AUTHORS Keith,W.N.
TITLE Promoter region of mouse and human telomerase RNA component genes
JOURNAL Patent: JP 2002509699-A 34 02-APR-2002;
COMMENT CANCER RESEARCH CAMPAIGN TECHNOLOGY LTD
OS Artificial Sequence
PN JP 2002509699-A/34
PD 02-APR-2002
PF 29-JAN-1999 JP 2000529424
PI 29-JAN-1998 GB 9801902.9
PR WILLIAM NICOL KEITH
PC C12N15/09,A61K31/7105,A61K31/711,A61K35/76,A61K38/00,A61K45/00, PC
A61K48/00,
PC A61P35/00,C12N1/15,C12N1/19,C12N1/21,C12N5/10,C12P21/02 PC
,C12Q1/68//C12N9/12,
PC (A61K35/76,A61K31:522),C12N15/00,A61K37/02,C12N5/00 CC
Description of Artificial Sequence: Primer
FH Key Location/Qualifiers
FT source 1..20
FT /organism='Artificial Sequence'.

FEATURES
source
1..20
/organism="synthetic construct"
/mol_type="genomic DNA"
/db_xref="taxon:32630"

Query Match      4.1%; Score 18.4; DB 1; Length 20;
Best Local Similarity 95.0%; Pred. No. 1.4e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 102 TTCTCGCTGACTTTCAGCGG 121
Db 20 TTCTCGCTGACTTTCAGCGG 1

RESULT 199
AX019577/c
LOCUS AX019577/c
DEFINITION Sequence 31 from Patent WO9938964.
ACCESSION AX019577
VERSION AX019577.1 GI:10043491
KEYWORDS synthetic construct
SOURCE synthetic construct
ORGANISM other sequences; artificial sequences.
REFERENCE 1
AUTHORS Keith,W.N.
TITLE Promoter regions of the mouse and human telomerase rna component genes
JOURNAL Patent: WO 9938964-A 31 05-AUG-1999;
KEITH WILLIAM NICOL (GB); CANCER RES CAMPAIGN TECH (GB)
PC C12N15/54,C12N9/12,A61K38/45,C07K16/40,C12Q1/68,C12Q1/48, PC
C12N15/11,
PC A61K31/70
CC Description of Artificial Sequence:Synthesized Amplification
1..20
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/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/note="primer"

Query Match      4.1%; Score 18.4; DB 1; Length 20;
Best Local Similarity 95.0%; Pred. No. 1.4e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 102 TTCTCGCTGACTTTCAGCGG 121
Db 20 TTCTCGCTGACTTTCAGCGG 1

RESULT 200
AX019580/c
LOCUS AX019580
DEFINITION Sequence 34 from Patent WO9938964.
ACCESSION AX019580
VERSION AX019580.1 GI:10043494
KEYWORDS synthetic construct
SOURCE synthetic construct
ORGANISM other sequences; artificial sequences.
REFERENCE 1
AUTHORS Keith,W.N.
TITLE Promoter regions of the mouse and human telomerase rna component genes
JOURNAL Patent: WO 9938964-A 34 05-AUG-1999;
KEITH WILLIAM NICOL (GB); CANCER RES CAMPAIGN TECH (GB)
PC C12N15/54,C12N9/12,A61K38/45,C07K16/40,C12Q1/68,C12Q1/48, PC
C12N15/11,
PC A61K31/70
CC Description of Artificial Sequence:Synthesized Amplification
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/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/note="primer"

Query Match      4.1%; Score 18.4; DB 1; Length 20;
Best Local Similarity 95.0%; Pred. No. 1.4e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 102 TTCTCGCTGACTTTCAGCGG 121
Db 20 TTCTCGCTGACTTTCAGCGG 1

RESULT 201
BD196339
LOCUS BD196339
DEFINITION Vertebrate telomerase genes and proteins and uses thereof.
ACCESSION BD196339
VERSION BD196339.1 GI:33006109
KEYWORDS JP 2002514928-A/73.
SOURCE synthetic construct
ORGANISM other sequences; artificial sequences.
REFERENCE 1 (bases 1 to 18)
AUTHORS Killian,A. and Bowtell,D.
TITLE Vertebrate telomerase genes and proteins and uses thereof
JOURNAL Patent: JP 2002514928-A 73 21-MAY-2002;
CAMBIA BIOSYSTEMS LLC,PETER MACCALLUM CANCER INSTITUTE
OS Artificial Sequence
PN JP 2002514928-A/73
PD 21-MAY-2002
PF 01-JUL-1998 JP 1999508771
PR 01-JUL-1997 US 60/051410,21-JUL-1997 US 60/053018 PR
21-JUL-1997 US 60/053329,04-AUG-1997 US 60/054642 PR
09-SEP-1997 US 60/058287
PI ANDRZEJ KILIAN,DAVID BOWTELL
PC C12N15/54,C12N9/12,A61K38/45,C07K16/40,C12Q1/68,C12Q1/48, PC
C12N15/11,
PC A61K31/70
CC Description of Artificial Sequence:Synthesized Amplification
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CC      based on EST Sequence GenBank Accession Number AA281296 FH
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FT      1..18
FT      Location/Qualifiers
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Best Local Similarity 100.0%; Pred. No. 1.4e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      1 GGGTTGCGGAGGTGGGC 18
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Db      1 GGGTTGCGGAGGTGGGC 18

RESULT 202
BD071043/c
LOCUS      BD071043      18 bp      DNA      linear      PAT 27-AUG-2002
DEFINITION Modulation of mammalian telomerase by peptide nucleic acids.
ACCESSION  BD071043
VERSION     JP 2001517929-A/9.
KEYWORDS
SOURCE      unclassified
ORGANISM    unclassified.
REFERENCE   1 (bases 1 to 18)
AUTHORS    Shay,J.W., Wright,W.E., Piatyazek,M.A., Corey,D. and Norton,J.C.
TITLE      Modulation of mammalian telomerase by peptide nucleic acids
JOURNAL
COMMENT
OS      Unidentified
PN      JP 2001517929-A/9
PD      09-OCT-2001
PF      09-APR-1997 JP 1997536487
PR      09-APR-1996 US 08/630019
PI      JERRY W SHAY, WOODRING E WRIGHT, MIECZYSLAW A PIATYSZEK, DAVID
PI      COREY,
PI      JAMES C NORTON
PC      C07K14/00,A61K38/16,C12Q1/68
CC      Strandedness: Single;
CC      Topology: linear;
CC      /desc = 'peptide nucleic acid (PNA), where (deoxy(ribose- CC
        phosphate
        to
        CC      nucleotide bases via glycine amino N through a CC
        methylenecarbonyl linker'
FH      key      Location/Qualifiers
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FT      Location/Qualifiers
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Query Match      4.0%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 1.4e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      48 AACCTTAAGTGAAGGG 65
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Db      18 AACCTTAAGTGAAGGG 1

RESULT 203
BD225844
LOCUS      BD225844      22 bp      DNA      linear      PAT 17-JUL-2003

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DEFINITION Promoter region of mouse and human telomerase RNA component genes.
ACCESSION  BD225844
VERSION     GI:33035614
KEYWORDS    JP 2002509699-A/47.
SOURCE      synthetic construct
ORGANISM    synthetic construct
            other sequences; artificial sequences.
            1 (bases 1 to 22)
            Keith,W.N.
REFERENCE   1 (bases 1 to 22)
AUTHORS    Keith,W.N.
TITLE      Promoter region of mouse and human telomerase RNA component genes
JOURNAL    CANCER RESEARCH CAMPAIGN TECHNOLOGY LTD
COMMENT    OS Artificial Sequence
            PN JP 2002509699-A/47
            PD 02-APR-2002
            PF 29-JAN-1999 JP 2000529424
            PR 29-JAN-1998 GB 9801902.9
            PI WILLIAM NICOL KEITH
            PC
            C12N15/09,A61K31/7105,A61K31/711,A61K35/76,A61K38/00,A61K45/00, PC
            A61K48/00,
            PC A61P35/00,C12N1/15,C12N1/19,C12N1/21,C12N5/10,C12P21/02 PC
            C12Q1/68//C12N9/12.
            PC (A61K35/76,A61K31:522),C12N15/00,A61K37/02,C12N5/00 CC
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Best Local Similarity 86.4%; Pred. No. 1.9e+02;
Matches 19; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy      15 GGGCCTGGGAGGGTGGTGCC 36
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Db      1 GGGCCTGGGTAAAGGTGGTGCC 22

RESULT 204
AX019593
LOCUS      AX019593      22 bp      DNA      linear      PAT 07-SEP-2000
DEFINITION Sequence 47 from Patent WO9938964.
ACCESSION  AX019593
VERSION     AX019593.1 GI:10043507
KEYWORDS
SOURCE      synthetic construct
            other sequences; artificial sequences.
ORGANISM
REFERENCE   1
AUTHORS    Keith,W.N.
TITLE      Promoter regions of the mouse and human telomerase rna component
            genes
            Patent: WO 9938964-A 47 05-AUG-1999;
            KEITH WILLIAM NICOL (GB); CANCER RES CAMPAIGN TECH (GB)
JOURNAL
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Query Match      3.8%; Score 17.2; DB 1; Length 22;
Best Local Similarity 86.4%; Pred. No. 1.9e+02;
Matches 19; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy      15 GGGCCTGGGAGGGTGGTGCC 36
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Db      1 GGGCCTGGGTAAAGGTGGTGCC 22

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RESULT 205  
AR063838/c  
LOCUS AR063838 17 bp DNA linear PAT 29-SEP-1999  
DEFINITION Sequence 14 from patent US 5846723.  
ACCESSION AR063838  
VERSION AR063838.1 GI:5993146  
KEYWORDS  
SOURCE  
ORGANISM  
REFERENCE  
1 (bases 1 to 17)  
AUTHORS Kim,N.Woo., Wu,F., Kealey,J.T., Pruzan,R. and Weinrich,S.L.  
TITLE Methods for detecting the RNA component of telomerase  
JOURNAL Patent: US 5846723-A 14 08-DEC-1998;  
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/mol\_type="unassigned DNA"  
Query Match 3.8%; Score 17; DB 1; Length 17;  
Best Local Similarity 100.0%; Pred. No. 1.5e+02;  
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 177 TGTCACTGCTGGCCCG 193  
Db 17 TGTCACTGCTGGCCCG 1  
RESULT 206  
BD023710/c  
LOCUS BD023710 17 bp DNA linear PAT 27-AUG-2002  
DEFINITION Method for detecting and inhibiting RNA component of telomerase.  
ACCESSION BD023710  
VERSION BD023710.1 GI:22564933  
KEYWORDS JP 2001507229-A/14.  
SOURCE unidentified  
ORGANISM unclassified.  
REFERENCE  
1 (bases 1 to 17)  
AUTHORS Kim,N.W., Wu,F., Kealey,J.T., Pruzan,R. and Weinrich,S.L.  
TITLE Method for detecting and inhibiting RNA component of telomerase  
JOURNAL Patent: JP 2001507229-A 14 05-JUN-2001;  
COMMENT GERON CORP  
PN JP 2001507229-A/14  
PD 05-JUN-2001  
PF 19-DEC-1997 JP 1998529003  
PR 20-DEC-1996 US 08/770564,20-DEC-1996 US 08/770565 PI  
NAM WOO KIM,FRED WU,JAMES T KEALEY,RONALD PRUZAN,SCOTT L PI  
WEINRICH  
PC C12N15/09,A61K9/08,A61K31/7105,A61K45/00,A61K48/00,A61P35/00,  
PC C12N5/10,  
PC C12N9/12,C12Q1/68,C12Q1/68,C12N15/00,C12N5/00 CC  
Strandedness: Single;  
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Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 177 TGTCACTGCTGGCCCG 193  
Db 17 TGTCACTGCTGGCCCG 1

RESULT 207  
E36993/c  
LOCUS E36993 18 bp DNA linear PAT 18-JUN-2001  
DEFINITION Human telomerase catalytic subunit promoter.  
ACCESSION E36993  
VERSION E36993.1 GI:13022956  
KEYWORDS JP 1999253177-A/201.  
SOURCE unidentified  
ORGANISM unclassified.  
REFERENCE  
1 (bases 1 to 18)  
AUTHORS Thomas,R.S., Jochimu,R., Toru,N., Karen,B.C., Greg,B.M., Calvin,B.H. and William,H.A.  
TITLE Human telomerase catalytic subunit promoter  
JOURNAL Patent: JP 1999253177-A 201 21-SEP-1999;  
COMMENT JERON CORP,UNIVERSITY TECHNOLOGY CORP  
OS Unidentified  
PN JP 1999253177-A/201  
PD 21-SEP-1999  
PF 15-OCT-1998 JP 1998320169  
PR 01-OCT-1996 US 08/724.643,18-APR-1997 US 08/844.419, PR 25-APR-1997 US 08/846.017,06-MAY-1997 US 08/851.843, PR 09-MAY-1997 US 08/854.050,14-AUG-1997 US 08/911.312, PR 14-AUG-1997 US 08/912.951,14-AUG-1997 US 08/915.503 PI THOMAS R SECHI,JOCHIMU RINGNER,TORU NAKAMURA,KAREN B CHAPMAN, PI GREG B MORIN,  
PI CALVIN B HAREI,WILLIAM H ANDREWS  
PC C12N15/09,A61K31/70,A61K38/55,A61K39/395,A61K39/395,A61K48/00,  
PC C12Q1/02,  
PC C12Q1/48,C12Q1/68,G01N33/15,G01N33/48,G01N33/50//C07K14/47, PC C07K16/40,  
PC C12N1/19,C12N1/21,C12N5/10,C12N9/12,C12P21/08, (C12N1/19, PC C12R1:84),  
PC (C12N1/21,C12R1:19), (C12N9/12,C12R1:19), (C12N9/12,C12R1:84),  
PC (C12N9/12,C12R1:91),C12N15/00,A61K37/64,C12N5/00 CC  
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Best Local Similarity 94.4%; Pred. No. 1.7e+02;  
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
QY 149 CACCGTTCATTCTAGAGC 166  
Db 18 CACCGTTCATTCTAGAGC 1  
RESULT 208  
AR390670/c  
LOCUS AR390670 18 bp DNA linear PAT 18-DEC-2003  
DEFINITION Sequence 543 from patent US 6610839.  
ACCESSION AR390670  
VERSION AR390670.1 GI:40112602  
KEYWORDS  
SOURCE  
ORGANISM  
REFERENCE  
1 (bases 1 to 18)  
AUTHORS Morin,G.B. and Andrews,W.H.  
TITLE Promoter for telomerase reverse transcriptase  
JOURNAL Patent: US 6610839-A 543 26-AUG-2003;  
FEATURES  
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1. .18  
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/mol\_type="genomic DNA"

Query Match 3.6%; Score 16.4; DB 1; Length 18;  
Best Local Similarity 94.4%; Pred. No. 1.7e+02;  
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
Qy 149 CACGGTTCATTCTAGAGC 166  
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Db 18 CACCCCTTCATTCTAGAGC 1

RESULT 209  
AR393284/C  
LOCUS AR393284 18 bp DNA linear PAT 18-DEC-2003  
DEFINITION Sequence 543 from patent US 6617110.  
ACCESSION AR393284  
VERSION AR393284.1 GI:40118644  
KEYWORDS  
SOURCE  
ORGANISM  
REFERENCE 1 (bases 1 to 18)  
AUTHORS Cech,T.R., Lingner,J., Nakamura,T., Chapman,K.B., Morin,G.B.,  
Harley,C.B. and Andrews,W.H.  
TITLE Cells immortalized with telomerase reverse transcriptase for use in  
drug screening  
JOURNAL Patent: US 6617110-A 543 09-SEP-2003;  
FEATURES  
source  
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Query Match 3.6%; Score 16.4; DB 1; Length 18;  
Best Local Similarity 94.4%; Pred. No. 1.7e+02;  
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
Qy 149 CACGGTTCATTCTAGAGC 166  
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Db 18 CACCCCTTCATTCTAGAGC 1

RESULT 210  
AX810578/C  
LOCUS AX810578 18 bp DNA linear PAT 25-NOV-2003  
DEFINITION Sequence 543 from Patent EP1333094.  
ACCESSION AX810578  
VERSION AX810578.1 GI:38524067  
KEYWORDS  
SOURCE  
ORGANISM  
REFERENCE 1  
AUTHORS Cech,T.R., Lingner,J., Nakamura,T., Chapman,K.B., Morin,G.B.,  
Harley,C.B. and Andrews,W.H.  
TITLE Human telomerase catalytic subunit  
JOURNAL Patent: EP 1333094-A 543 06-AUG-2003;  
Geron Corporation (US) ; University Technology Corporation (US)  
FEATURES  
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1. .18  
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Query Match 3.6%; Score 16.4; DB 1; Length 18;  
Best Local Similarity 94.4%; Pred. No. 1.7e+02;  
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
Qy 149 CACGGTTCATTCTAGAGC 166  
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Db 18 CACCCCTTCATTCTAGAGC 1

RESULT 211  
BD011244/C

LOCUS BD011244 18 bp DNA linear PAT 31-JAN-2002  
DEFINITION Human telomerase catalytic subunit.  
ACCESSION BD011244  
VERSION BD011244.1 GI:18639617  
KEYWORDS  
SOURCE  
ORGANISM  
REFERENCE 1 (bases 1 to 18)  
AUTHORS Sechi,T.R., Lingner,J., Nakamura,T., Chapman,K.B., Mori,G.B.,  
Harley,C.B. and Andrews,W.H.  
TITLE Human telomerase catalytic subunit  
JOURNAL Patent: JP 2001081042-A 201 27-MAR-2001;  
GERON CORP, UNIVERSITY TECHNOLOGY CORP  
COMMENT  
OS Unidentified  
PN JP 2001081042-A/201  
PD 27-MAR-2001

PF 27-JUL-2000 JP 2000227474  
PR 01-OCT-1996 US 08/724643,18-APR-1997 US 08/844419 PR  
25-APR-1997 US 08/846017,06-MAY-1997 US 08/851843 PR  
09-MAY-1997 US 08/854050,14-AUG-1997 US 08/911312 PR  
14-AUG-1997 US 08/912951,14-AUG-1997 US 08/915503 PI THOMAS  
R SECHI,JOACHIM LINGNER,TORU NAKAMURA,KAREN B CHAPMAN,PI GREG B  
MORIN,  
PI CALVIN B HARLEY,WILLIAM H ANDREWS  
PC A61K38/00,A61K31/7088,A61K39/00,A61K48/00,A61P35/00,A61P43/00,  
PC C07K5/10,  
PC C07K5/107,C07K5/117,C07K7/06,C07K7/08,C07K16/40,C12N9/12, PC  
C12N15/09,  
PC C12Q1/02,C12Q1/48,C12Q1/68,G01N33/15,G01N33/50,G01N33/53, PC  
G01N33/53,  
PC G01N33/566,G01N33/573//C12P21/08,A61K37/02,C12N15/00 CC  
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CC Topology: Linear;  
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Query Match 3.6%; Score 16.4; DB 1; Length 18;  
Best Local Similarity 94.4%; Pred. No. 1.7e+02;  
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
Qy 149 CACGGTTCATTCTAGAGC 166  
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Db 18 CACCCCTTCATTCTAGAGC 1

RESULT 212  
BD196340/C  
LOCUS BD196340 21 bp DNA linear PAT 17-JUL-2003  
DEFINITION Vertebrate telomerase genes and proteins and uses thereof.  
ACCESSION BD196340  
VERSION BD196340.1 GI:33006110  
KEYWORDS JP 2002514928-A/74.  
SOURCE synthetic construct  
ORGANISM other sequences; artificial sequences.  
REFERENCE 1 (bases 1 to 21)  
AUTHORS Kilian,A. and Bowtell,D.  
TITLE Vertebrate telomerase genes and proteins and uses thereof  
JOURNAL Patent: JP 2002514928-A 74 21-MAY-2002;  
CAMBIA BIOSYSTEMS LLC,PETER MACCALLUM CANCER INSTITUTE  
COMMENT  
OS Artificial Sequence  
PN JP 2002514928-A/74  
PD 21-MAY-2002

PF 01-JUL-1998 JP 1999508771  
PR 01-JUL-1997 US 60/051410,21-JUL-1997 US 60/053018 PR  
21-JUL-1997 US 60/053329,04-AUG-1997 US 60/054642 PR

09-SEP-1997 US 60/058287  
PI ANDRZEJ KILIAN, DAVID BOWTELL  
PC C12N15/54, C12N9/12, A61K38/45, C07K16/40, C12Q1/68, C12Q1/48, PC  
C12N15/11,  
PC A61K31/70  
CC Description of Artificial Sequence: Synthesized Amplification  
CC Primer Design  
CC based on EST Sequence GenBank Accession Number AA281296 FH  
Key Location/Qualifiers  
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Query Match 3.6%; Score 16.2; DB 1; Length 21;  
Best Local Similarity 85.7%; Pred. No. 2.1e+02;  
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 431 CAGGACTCGGCTCACACATGC 451  
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Db 21 CAGGACTCGGCTCACACTGC 1

RESULT 213  
AR193717  
LOCUS AR193717 21 bp DNA linear PAT 20-APR-2002  
DEFINITION Sequence 13 from patent US 6348327.  
ACCESSION AR193717  
VERSION AR193717.1 GI:20240309  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unknown.  
REFERENCE 1 (bases 1 to 21)  
AUTHORS Gorman, C.M. and Groskreutz, D.J.  
TITLE Non-encodine animal host cells capable of expressing variant  
proinsulin and processing the same to form active, mature insulin  
and methods of culturing such cells  
JOURNAL Patent: US 6348327-A 13 19-FEB-2002;  
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Query Match 3.6%; Score 16.2; DB 1; Length 21;  
Best Local Similarity 85.7%; Pred. No. 2.1e+02;  
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 156 CATTCTAGAGCAACAAACAAA 176  
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Db 1 CATTCTAGAGCAACAGACAA 21

RESULT 214  
BD071060  
LOCUS BD071060 16 bp DNA linear PAT 27-AUG-2002  
DEFINITION Modulation of mammalian telomerase by peptide nucleic acids.  
ACCESSION BD071060  
VERSION BD071060.1 GI:22616663  
KEYWORDS JP 2001517929-A/26.  
SOURCE unidentified  
ORGANISM unclassified.  
REFERENCE 1 (bases 1 to 16)  
AUTHORS Shay, J.W., Wright, W.E., Piatyszek, M.A., Corey, D. and Norton, J.C.  
TITLE Modulation of mammalian telomerase by peptide nucleic acids  
JOURNAL Patent: JP 2001517929-A 26 09-OCT-2001;  
COMMENT GERON CORP  
OS Unidentified  
PN JP 2001517929-A/26

09-OCT-2001  
PD 09-APR-1997 JP 1997536487  
PF 09-APR-1996 US 08/630019  
PR JERRY W SHAY, WOODRING E WRIGHT, MIECZYSLAW A PIATYSZEK, DAVID  
PI COREY,  
PI JAMES C NORTON  
PC C07K14/00, A61K38/16, C12Q1/68  
CC Strandedness: Single;  
CC Topology: Linear;  
CC /desc = 'peptide nucleic acid (PNA), where (deoxy(ribose- CC  
phosphate  
linkages are replaced by N-(2-aminoethyl)glycine units linked  
to  
CC nucleotide bases via glycine amino N through a CC  
methylenecarbonyl linker'  
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Query Match 3.5%; Score 16; DB 1; Length 16;  
Best Local Similarity 100.0%; Pred. No. 1.7e+02;  
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 53 TAACTGAGAAGGCGCT 68  
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Db 1 TAACTGAGAAGGCGCT 16

RESULT 215  
BD225814  
LOCUS BD225814 20 bp DNA linear PAT 17-JUL-2003  
DEFINITION Promoter region of mouse and human telomerase RNA component genes.  
ACCESSION BD225814  
VERSION BD225814.1 GI:33035584  
KEYWORDS JP 2002509699-A/17.  
SOURCE synthetic construct  
ORGANISM synthetic construct  
REFERENCE 1 (bases 1 to 20)  
AUTHORS Keith, W.N.  
TITLE Promoter region of mouse and human telomerase RNA component genes  
JOURNAL Patent: JP 2002509699-A 17 02-APR-2002;  
COMMENT CANCER RESEARCH CAMPAIGN TECHNOLOGY LTD  
OS Artificial Sequence  
PN JP 2002509699-A/17  
PD 02-APR-2002  
PF 29-JAN-1999 JP 2000529424  
PR 29-JAN-1998 GB 9801902.9  
PI WILLIAM NICOL KEITH  
PC C12N15/09, A61K31/7105, A61K31/711, A61K35/76, A61K38/00, A61K45/00, PC  
A61K48/00,  
PC A61P35/00, C12N1/15, C12N1/19, C12N1/21, C12N5/10, C12P21/02 PC  
, C12Q1/68//C12N9/12,  
PC (A61K35/76, A61K31:522), C12N15/00, A61K37/02, C12N5/00 CC  
Description of Artificial Sequence: Primer  
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Query Match 3.5%; Score 16; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 2e+02;  
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;



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QY 436 CTCGGCTCACACATGC 451
Db 1 CTCGGCTCACACATGC 16

RESULT 216
AX019563
LOCUS AX019563 20 bp DNA linear PAT 07-SEP-2000
DEFINITION Sequence 17 from Patent WO938964.
ACCESSION AX019563
VERSION AX019563.1 GI:10043477
KEYWORDS
SOURCE synthetic construct
ORGANISM other sequences; artificial sequences.
REFERENCE
AUTHORS Keith,W.N.
TITLE Promoter regions of the mouse and human telomerase rna component
JOURNAL genes
FEATURES
source
Patent: WO 938964-A 17 05-AUG-1999;
KEITH WILLIAM NICOL (GB); CANCER RES CAMPAIGN TECH (GB)
Location/Qualifiers
1..20
/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/note="primer"

Query Match 3.5%; Score 16; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 2e+02;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 436 CTCGGCTCACACATGC 451
Db 1 CTCGGCTCACACATGC 16

RESULT 217
BD221936
LOCUS BD221936 20 bp DNA linear PAT 17-JUL-2003
DEFINITION Nucleic acid encoding retinoblastoma-binding protein (RBP-7) and
polymorphic marker relating to the nucleic acid.
ACCESSION BD221936
VERSION BD221936.1 GI:33031706
KEYWORDS JP 2002519027-A/75.
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
REFERENCE Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
AUTHORS Bougueleret,L.
TITLE Nucleic acid encoding retinoblastoma-binding protein (RBP-7) and
polymorphic marker relating to the nucleic acid
JOURNAL Patent: JP 2002519027-A 75 02-JUL-2002;
GENSET
COMMENT OS Homo sapiens (human)
PN JP 2002519027-A/75
PD 02-JUL-2002
PF 30-JUN-1999 JP 2000557360
PR 30-JUN-1998 US 60/091315,10-DEC-1998 US 60/111909 PT
LYDIE BOUGUELERET
PC C12N15/09,C12N15/09,A01K67/027,C07K14/47,C07K16/18,C12N5/10,
PC C1201/68.
PC G01N33/53,G01N33/566,C12N15/00,C12N5/00,C12N15/00 CC
upstream amplification primer for SEQ 34, SEQ 55, SEQ 35, SEQ CC
56
FH Key Location/Qualifiers
FT primer_bind 1..20.
Location/Qualifiers
1..20
/organism="Homo sapiens"
/mol_type="genomic DNA"

QY 436 CTCGGCTCACACATGC 451
Db 1 CTCGGCTCACACATGC 16

RESULT 218
AX019563
LOCUS AX019563 20 bp DNA linear PAT 20-JUN-2002
DEFINITION Sequence 76 from patent US 6399373.
ACCESSION AR211866
VERSION AR211866.1 GI:21515301
KEYWORDS
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 20)
AUTHORS Bougueleret,L.
TITLE Nucleic acid encoding a retinoblastoma binding protein (RBP-7) and
polymorphic markers associated with said nucleic acid
JOURNAL Patent: US 6399373-A 76 04-JUN-2002;
FEATURES
source
Location/Qualifiers
1..20
/organism="unknown"
/mol_type="unassigned DNA"

Query Match 3.4%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 2.2e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 166 CAAACAAAATAATGTCAG 182
Db 1 CAAACAAAATAATGTCAG 17

RESULT 219
AR199735
LOCUS AR199735 20 bp DNA linear PAT 20-APR-2002
DEFINITION Sequence 11 from patent US 6355481.
ACCESSION AR199735
VERSION AR199735.1 GI:20249809
KEYWORDS
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 20)
AUTHORS Li,X.-J. and Li,S.-H.
TITLE Hybridoma cell line and monoclonal antibody for huntingtin protein
JOURNAL Patent: US 6355481-A 11 12-MAR-2002;
FEATURES
source
Location/Qualifiers
1..20
/organism="unknown"
/mol_type="unassigned DNA"

Query Match 3.4%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 2.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 313 CTGTCAGCGCGGTCTCTC 332
Db 1 CTGTCAGCGCGGTCTCTC 20

RESULT 220
AX060355
LOCUS AX060355 20 bp DNA linear PAT 22-JAN-2001
DEFINITION Sequence 11 from Patent WO078813.
ACCESSION AX060355
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VERSION AX060355.1 GI:12405842
KEYWORDS .
SOURCE synthetic construct
ORGANISM synthetic construct
REFERENCE 1
AUTHORS Li,X.J. and Li,S.H.
TITLE Huntington disease cellular model: stably transfected pc12 cells
JOURNAL expressing mutant huntingtin
Patent: WO 0078813-A 11 28-DEC-2000;
Emory University (US)
FEATURES
source
1..20
Location/Qualifiers
/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/note="PCR primer"

Query Match 3.4%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 2.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 313 CTGTCAGCGCGGCTCTC 332
Db 1 CTGTCGCCACGGGTTCTC 20

RESULT 221
AR063834/c
LOCUS AR063834 15 bp DNA linear PAT 29-SEP-1999
DEFINITION Sequence 10 from patent US 5846723.
ACCESSION AR063834
VERSION AR063834.1 GI:5993142
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE 1 (bases 1 to 15)
AUTHORS Kim,N.Woo., Wu,F., Kealey,J.T., Pruzan,R. and Weinrich,S.L.
TITLE Methods for detecting the RNA component of telomerase
JOURNAL Patent: US 5846723-A 10 08-DEC-1998;
FEATURES
source
1..15
Location/Qualifiers
/organism="unknown"
/mol_type="unassigned DNA"

Query Match 3.3%; Score 15; DB 1; Length 15;
Best Local Similarity 100.0%; Pred. No. 1.8e+02;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 152 CGTTCATTCTAGAGC 166
Db 15 CGTTCATTCTAGAGC 1

RESULT 222
BD023706/c
LOCUS BD023706 15 bp DNA linear PAT 27-AUG-2002
DEFINITION Method for detecting and inhibiting RNA component of telomerase.
ACCESSION BD023706
VERSION BD023706.1 GI:22564929
KEYWORDS JP 2001507229-A/10.
SOURCE unidentified
ORGANISM unidentified
REFERENCE 1 (bases 1 to 15)
AUTHORS Kim,N.W., Wu,F., Kealey,J.T., Pruzan,R. and Weinrich,S.L.
TITLE Method for detecting and inhibiting RNA component of telomerase
JOURNAL Patent: JP 2001507229-A 10 05-JUN-2001;
GERON CORP
COMMENT FN JP 2001507229-A/10
PD 05-JUN-2001
PF 19-DEC-1997 JP 1998529003

PR 20-DEC-1996 US 08/770564,20-DEC-1996 US 08/770565 PI
NAM WOO KIM, FRED WU, JAMES T KEALEY, RONALD PRUZAN, SCOTT L PI
WEINRICH
PC C12N15/09,A61K9/08,A61K31/7105,A61K45/00,A61K48/00,A61P35/00,
PC C12N5/10,
PC C12N9/12,C12Q1/68,C12Q1/68,C12N15/00,C12N5/00 CC
Strandedness: Single;
CC Topology: Linear;
CC /note= 'oligo 21ab3',
FH Key Location/Qualifiers.
1..15
source Location/Qualifiers
/organism="unidentified"
/mol_type="genomic DNA"
/db_xref="taxon:32644"

Query Match 3.3%; Score 15; DB 1; Length 15;
Best Local Similarity 100.0%; Pred. No. 1.8e+02;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 152 CGTTCATTCTAGAGC 166
Db 15 CGTTCATTCTAGAGC 1

RESULT 223
BD071036/c
LOCUS BD071036 15 bp DNA linear PAT 27-AUG-2002
DEFINITION Modulation of mammalian telomerase by peptide nucleic acids.
ACCESSION BD071036
VERSION BD071036.1 GI:22616639
KEYWORDS JP 2001517929-A/2.
SOURCE unidentified
ORGANISM unidentified
REFERENCE 1 (bases 1 to 15)
AUTHORS Shay,J.W., Wright,W.E., Piatyszek,M.A., Corey,D. and Norton,J.C.
TITLE Modulation of mammalian telomerase by peptide nucleic acids
JOURNAL Patent: JP 2001517929-A 2 09-OCT-2001;
GERON CORP
COMMENT OS Unidentified
PN JP 2001517929-A/2
PD 09-OCT-2001
PF 09-APR-1997 JP 1997536487
PR 09-APR-1996 US 08/630019
PI JERRY W SHAY, WOODRING E WRIGHT, MIECZYSLAW A PIATYSZEK, DAVID
PI COREY, C NORTON
PC C07K14/00,A61K38/16,C12Q1/68
CC Strandedness: Single;
CC Topology: Linear;
CC /desc = 'peptide nucleic acid (PNA), where (deoxy(ribose- CC
phosphate
linkages are replaced by N-(2-aminoethyl)glycine units linked
to
nucleotide bases via glycine amino N through a CC
methylenecarbonyl linker'
FH Key Location/Qualifiers
1..15
source Location/Qualifiers
/organism="unidentified"
/mol_type="genomic DNA"
/db_xref="taxon:32644"

Query Match 3.3%; Score 15; DB 1; Length 15;
Best Local Similarity 100.0%; Pred. No. 1.8e+02;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 46 CTAACCTTAAGTCTAG 60
Db 15 CTAACCTTAAGTCTAG 1

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RESULT 224
BD071039/c
LOCUS
DEFINITION Modulation of mammalian telomerase by peptide nucleic acids.
ACCESSION BD071039
VERSION BD071039.1 GI:22616642
KEYWORDS JP 2001517929-A/5.
SOURCE
ORGANISM
unidentified
unclassified.
1 (bases 1 to 15)
Shay,J.W., Wright,W.E., Piatyszek,M.A., Corey,D. and Norton,J.C.
AUTHORS Modulation of mammalian telomerase by peptide nucleic acids
JOURNAL Patent: JP 2001517929-A 5 09-OCT-2001;
GERON CORP
COMMENT
OS Unidentified
PN JP 2001517929-A/5
PD 09-OCT-2001
PF 09-APR-1997 JP 1997536487
PR 09-APR-1996 US 08/630019
PI JERRY W SHAY,WOODRING E WRIGHT,MIECZYSLAW A PIATYSZEK,DAVID
PI COREY, C NORTON
PC C07K14/00,A61K38/16,C12Q1/68
CC Strandedness: Single;
CC Topology: Linear;
CC /desc = 'peptide nucleic acid (PNA), where (deoxy(ribose- CC
phosphate
linkages are replaced by N-(2-aminoethyl)glycine units linked
to
nucleotide bases via glycine amino N through a CC
methylenecarbonyl linker',
FH Key Location/Qualifiers
FT source 1..15
/organism='Unidentified'.
FEATURES
source
1..15
Location/Qualifiers
/organism='unidentified'
/mol_type='genomic DNA'
/db_xref='taxon:32644'
Query Match 3.3%; Score 15; DB 1; Length 15;
Best Local Similarity 100.0%; Pred.No.1.8e+02;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 49 ACCCTAACTGAGAAG 63
Db 1 ACCCTAACTGAGAAG 15
|||||
RESULT 226
BD071078/c
LOCUS
DEFINITION Modulation of mammalian telomerase by peptide nucleic acids.
ACCESSION BD071078
VERSION BD071078.1 GI:22616681
KEYWORDS JP 2001517929-A/44.
SOURCE
ORGANISM
unidentified
unclassified.
1 (bases 1 to 15)
Shay,J.W., Wright,W.E., Piatyszek,M.A., Corey,D. and Norton,J.C.
AUTHORS Modulation of mammalian telomerase by peptide nucleic acids
JOURNAL Patent: JP 2001517929-A 44 09-OCT-2001;
GERON CORP
COMMENT
OS Unidentified
PN JP 2001517929-A/44
PD 09-OCT-2001
PF 09-APR-1997 JP 1997536487
PR 09-APR-1996 US 08/630019
PI JERRY W SHAY,WOODRING E WRIGHT,MIECZYSLAW A PIATYSZEK,DAVID
PI COREY, C NORTON
PC C07K14/00,A61K38/16,C12Q1/68
CC Strandedness: Single;
CC Topology: Linear;
CC /desc = 'phosphorothioate (PS) nucleic acid'
FH Key Location/Qualifiers
FT source 1..15
/organism='Unidentified'.
FEATURES
source
1..15
Location/Qualifiers
/organism='unidentified'
/mol_type='genomic DNA'
/db_xref='taxon:32644'
Query Match 3.3%; Score 15; DB 1; Length 15;
Best Local Similarity 100.0%; Pred.No.1.8e+02;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 46 CTAACCCCTAACTGAG 60
Db 15 CTAACCCCTAACTGAG 1
|||||
RESULT 225
BD071061
LOCUS
DEFINITION Modulation of mammalian telomerase by peptide nucleic acids.
ACCESSION BD071061
VERSION BD071061.1 GI:22616664
KEYWORDS JP 2001517929-A/27.
SOURCE
ORGANISM
unidentified
unclassified.
1 (bases 1 to 15)
Shay,J.W., Wright,W.E., Piatyszek,M.A., Corey,D. and Norton,J.C.
AUTHORS Modulation of mammalian telomerase by peptide nucleic acids
JOURNAL Patent: JP 2001517929-A 27 09-OCT-2001;
GERON CORP
COMMENT
OS Unidentified
PN JP 2001517929-A/27
PD 09-OCT-2001
PF 09-APR-1997 JP 1997536487
PR 09-APR-1996 US 08/630019
PI JERRY W SHAY,WOODRING E WRIGHT,MIECZYSLAW A PIATYSZEK,DAVID
PI
```

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RESULT 227
AX613673
LOCUS          AX613673          20 bp      DNA
DEFINITION     Sequence 4698 from Patent WO02072882.
ACCESSION      AX613673
VERSION        AX613673.1  GI:28409102
KEYWORDS       Homo sapiens (human)
SOURCE         Homo sapiens
ORGANISM       Homo sapiens
REFERENCE      Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
AUTHORS       Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
TITLE         Cullen,P. and Seedorf,U.
JOURNAL       Patent: WO 02072882-A 4698 19-SEP-2002;
              OGHAM GmbH (DE)
FEATURES       Location/Qualifiers
                source
                1..20
                /organism="Homo sapiens"
                /mol_type="unassigned DNA"
                /db_xref="taxon:9606"
Query Match   3.3%; Score 15; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 2.3e+02;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 269 GGGCTTCTCCGGAGG 283
Db 3 GGGCTTCTCCGGAGG 17
RESULT 228
AR241369/c
LOCUS          AR241369          18 bp      DNA
DEFINITION     Sequence 4 from patent US 6469156.
ACCESSION      AR241369
VERSION        AR241369.1  GI:27287033
KEYWORDS       Unknown.
SOURCE         Unknown.
ORGANISM       Unclassified.
REFERENCE      1 (bases 1 to 18)
AUTHORS       Schafer,M.P. and Reid,T.M.
TITLE         Rapid and sensitive method for detecting histoplasma capsulatum
JOURNAL       Patent: US 6469156-A 4 22-OCT-2002;
FEATURES       Location/Qualifiers
                source
                1..18
                /organism="unknown"
                /mol_type="genomic DNA"
Query Match   3.3%; Score 14.8; DB 1; Length 18;
Best Local Similarity 88.9%; Pred. No. 2.2e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
Qy 410 CTGAGCTGTGGACGTGC 427
Db 18 CTGACCGTGGGACGTGC 1
RESULT 229
I74343
LOCUS          I74343          19 bp      DNA
DEFINITION     Sequence 22 from patent US 5686643.
ACCESSION      I74343
VERSION        I74343.1  GI:3010484
KEYWORDS       Unknown.
SOURCE         Unknown.
ORGANISM       Unclassified.
REFERENCE      1 (bases 1 to 19)
AUTHORS       Oka,T., Matsunaga,H. and Yamane,A.
TITLE         Method of nucleic acid-differentiation and assay kit for nucleic
acid differentiation
JOURNAL       Patent: US 5686643-A 22 18-NOV-1997;
FEATURES       Location/Qualifiers
                source
                1..19
                /organism="unknown"
                /mol_type="unassigned DNA"
Query Match   3.3%; Score 14.8; DB 1; Length 19;
Best Local Similarity 88.9%; Pred. No. 2.3e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
Qy 348 GTTCAGGCGCTTTCAGGCC 365
Db 1 GATCAGGCGCTTTTAGGCC 18
RESULT 230
AB175197
LOCUS          AB175197          19 bp      DNA
DEFINITION     Synthetic construct DNA, forward primer for Japanese flounder
                microsatellite sequence Pol1104HFS-M.
ACCESSION      AB175197
VERSION        AB175197.1  GI:45752520
KEYWORDS       synthetic construct
SOURCE         synthetic construct
ORGANISM       other sequences; artificial sequences.
REFERENCE      1
AUTHORS       Fuji,K., Kobayashi,K., Mizuta,A., Hasegawa,O., Tabata,K.,
                Sakamoto,T. and Okamoto,N.
TITLE         A genetic linkage map of the Japanese Flounder, (Paralichthys
                olivaceus)
JOURNAL       Unpublished
REFERENCE      2 (bases 1 to 19)
AUTHORS       Mizuta,A., Tabata,K., Kobayashi,K., Fuji,K., Sakamoto,T. and
                Okamoto,N.
TITLE         Direct Submission
JOURNAL       Submitted (24-MAR-2004) Nobuaki Okamoto, Tokyo University of Marine
                Science and Technology, Department of Marine Biosciences; 4-5-7
                Konan, Minato-Ku, Tokyo 108-8477, Japan
                (E-mail:nokamoto@kaiyodai.ac.jp, Tel:81-3-5463-0547,
                Fax:81-3-5463-0552)
FEATURES       Location/Qualifiers
                source
                1..19
                /organism="synthetic construct"
                /mol_type="other DNA"
                /db_xref="taxon:32630"
                misc_feature
                1..19
                /note="forward primer for Japanese flounder microsatellite
                sequence Pol1104MHFS"
Query Match   3.3%; Score 14.8; DB 1; Length 19;
Best Local Similarity 88.9%; Pred. No. 2.3e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
Qy 89 CCGCGCGCTGTTCCTC 106
Db 2 CCGCTCGCTGTTCCTC 19
RESULT 231
BD274798
LOCUS          BD274798          18 bp      DNA
DEFINITION     CANCER CELL VACCINE.
ACCESSION      BD274798
VERSION        BD274798.1  GI:33084566
KEYWORDS       JP 2002531582-A/23.
SOURCE         synthetic construct
ORGANISM       synthetic construct
REFERENCE      1 (bases 1 to 18)
AUTHORS       Kusu,M., Oiu,G. and Hunfreys,R.
TITLE         CANCER CELL VACCINE
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JOURNAL Patent: JP 2002531582-A 23 24-SEP-2002;  
COMMENT ANTIGEN EXPRESS INC  
OS Artificial Sequence  
PN JP 2002531582-A/23  
PD 24-SEP-2002  
PF 24-NOV-1999 JP 2000586901  
PR 04-DEC-1998 US 09/205995  
PI minzhen kusu,gang qiu,robert hunfreese  
CC Description of Artificial Sequence: antisense oligonucleotide  
CC corresponding  
CC to a specific region of the mouse Ii gene.  
FH Key Location/Qualifiers.

FEATURES  
source  
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/organism="synthetic construct"  
/mol\_type="genomic DNA"  
/db\_xref="taxon:32630"

Query Match 3.2%; Score 14.4; DB 1; Length 18;  
Best Local Similarity 93.8%; Pred. No. 2.3e+02;  
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 220 GGTGGCTGCCAGCC 235  
|||||  
Db 1 GGTGGCTGCCAGCC 16

RESULT 232  
AR205264  
LOCUS 18 bp DNA linear PAT 20-JUN-2002  
DEFINITION Sequence 24 from patent US 6368855.  
ACCESSION AR205264  
VERSION AR205264.1 GI:21502804  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unknown.  
REFERENCE 1 (bases 1 to 18)  
AUTHORS Xu,M., Qiu,G. and Humphreys,R.  
TITLE MHC class II antigen presenting cells containing oligonucleotides  
which inhibit Ii protein expression  
JOURNAL Patent: US 6368855-A 24 09-APR-2002;  
LOCATION/Qualifiers

FEATURES  
source  
1..18  
/organism="unknown"  
/mol\_type="unassigned DNA"

Query Match 3.2%; Score 14.4; DB 1; Length 18;  
Best Local Similarity 93.8%; Pred. No. 2.3e+02;  
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 220 GGTGGCTGCCAGCC 235  
|||||  
Db 1 GGTGGCTGCCAGCC 16

RESULT 233  
AX055663  
LOCUS 17 bp DNA linear PAT 13-JAN-2001  
DEFINITION Sequence 21 from Patent WO0073499.  
ACCESSION AX055663  
VERSION AX055663.1 GI:12228803  
KEYWORDS  
SOURCE Aspergillus versicolor  
ORGANISM Aspergillus versicolor  
Eukaryota; Fungi; Ascomycota; Pezizomycotina; Eurotiomycetes;  
Eurotiales; Trichocomaceae; mitosporic Trichocomaceae; Aspergillus.  
REFERENCE 1  
AUTHORS Smith,T., Maher,M., Martin,C., Jannes,G., Roseau,R. and van der  
Weide,M.  
TITLE Nucleic acid probes and methods for detecting clinically important  
fungal pathogens  
JOURNAL Patent: WO 0073499-A 21 07-DEC-2000;

INNOCENTICS N.V. (BE) ; Enterprise Ireland (trading as Bioresearch  
Ireland) (IE)  
Location/Qualifiers  
1..17  
/organism="Aspergillus versicolor"  
/mol\_type="unassigned DNA"  
/db\_xref="taxon:46472"

Query Match 3.1%; Score 14; DB 1; Length 17;  
Best Local Similarity 100.0%; Pred. No. 2.4e+02;  
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 328 CTCTCGGGCGGAG 341  
|||||  
Db 2 CTCTCGGGCGGAG 15

RESULT 234  
AX099957/c  
LOCUS 17 bp DNA linear PAT 02-APR-2001  
DEFINITION Sequence 17 from Patent WO0120034.  
ACCESSION AX099957  
VERSION AX099957.1 GI:13538967  
KEYWORDS  
SOURCE Mus musculus (house mouse)  
ORGANISM Mus musculus  
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.  
REFERENCE 1  
AUTHORS Voss,J. and Timm,J.  
TITLE Methods and compositions for the screening of cell cycle modulators  
JOURNAL Patent: WO 0120034-A 17 22-MAR-2001;  
LOCATION/Qualifiers

FEATURES  
source  
1..17  
/organism="Mus musculus"  
/mol\_type="unassigned DNA"  
/db\_xref="taxon:10090"

Query Match 3.1%; Score 14; DB 1; Length 17;  
Best Local Similarity 100.0%; Pred. No. 2.4e+02;  
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 155 TCATTCTAGAGCAA 168  
|||||  
Db 15 TCATTCTAGAGCAA 2

RESULT 235  
BD251610  
LOCUS 17 bp DNA linear PAT 17-JUL-2003  
DEFINITION Selection of animal based on character imprinted by patent.  
ACCESSION BD251610  
VERSION BD251610.1 GI:33061380  
KEYWORDS  
SOURCE Sus scrofa (pig)  
ORGANISM Sus scrofa  
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
Mammalia; Eutheria; Cetartiodactyla; Suina; Suidae; Sus.  
REFERENCE 1 (bases 1 to 17)  
AUTHORS Andersson,L., Georges,M., Spincemalle,G. and Nezer,C.D.A.  
TITLE Selection of animal based on character imprinted by parent  
JOURNAL Patent: JP 2002535963-A 130 29-OCT-2002;  
UNIVERSITY OF LIEGE,MELICA HB,SEGHERS GENTEC NV  
COMMENT OS Sus scrofa (pig)  
PN JP 2002535963-A/130  
PD 29-OCT-2002  
PF 16-DEC-1999 JP 2000588390  
PR 16-DEC-1998 EP 98204291.3  
PI LEIF ANDERSSON,MICHEL GEORGES,GEERT SPINCEMALLE, PI CARINE  
DANIELLE ANDREE NEZER  
PC C12N15/09,A01K67/027,C12N5/06,C12Q1/68,C12N15/00,C12N5/00 CC  
/note="Polymorphism Tyrosine Hydroxylase gene" FH Key

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Location/Qualifiers
FT source 1..17
/organism='Sus scrofa (pig)'.

FEATURES
source
  Location/Qualifiers
    1..17
    /organism='Sus scrofa'
    /mol_type='genomic DNA'
    /db_xref='taxon:9823'

Query Match
Best Local Similarity 3.1%; Score 13.8; DB 1; Length 17;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 5 TCGCGAGGCTGGGCGTG 21
Db 1 TCGCGAGGCGGACCTG 17

RESULT 236
LOCUS I86370 17 bp DNA linear PAT 10-JUN-1998
DEFINITION Sequence 2 from patent US 5700922.
ACCESSION I86370
VERSION I86370.1 GI:3206088
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE
  1 (bases 1 to 17)
  Cook,P.Dan.
  PNA-DNA-PNA chimeric macromolecules
  TITLE Patent: US 5700922-A 2 23-DEC-1997;
  JOURNAL Location/Qualifiers
FEATURES
source
  1..17
  /organism='unknown'
  /mol_type='unassigned DNA'

Query Match
Best Local Similarity 3.1%; Score 13.8; DB 1; Length 17;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 102 TTCTCGCTGACTTTCAG 118
Db 1 TTCTCGCTGCATTTCAG 17

RESULT 237
LOCUS AR196361 17 bp DNA linear PAT 20-APR-2002
DEFINITION Sequence 826 from patent US 6350934.
ACCESSION AR196361
VERSION AR196361.1 GI:20245798
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE
  1 (bases 1 to 17)
  Zwick,M.G., Edington,B.E., McSwiggen,J.A., Merlo,P.Ann.Owens.,
  Guo,L., Skokut,T.A., Young,S.A., Folkerts,O. and Merlo,D.J.
  Nucleic acid encoding delta-9 desaturase
  TITLE Patent: US 6350934-A 826 26-FEB-2002;
  JOURNAL Location/Qualifiers
FEATURES
source
  1..17
  /organism='unknown'
  /mol_type='unassigned DNA'

Query Match
Best Local Similarity 3.1%; Score 13.8; DB 1; Length 17;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 106 CGCTGACTTTTCAGCGGG 122
Db 1 CGCTGCCTTTCAGCTGG 17

Location/Qualifiers
FT source 1..17
/organism='Sus scrofa (pig)'.

FEATURES
source
  Location/Qualifiers
    1..17
    /organism='Sus scrofa'
    /mol_type='genomic DNA'
    /db_xref='taxon:9823'

Query Match
Best Local Similarity 3.1%; Score 13.8; DB 1; Length 17;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 5 TCGCGAGGCTGGGCGTG 21
Db 1 TCGCGAGGCGGACCTG 17

RESULT 238
LOCUS AX028311 17 bp DNA linear PAT 16-SEP-2000
DEFINITION Sequence 130 from Patent WO0036143.
ACCESSION AX028311
VERSION AX028311.1 GI:10189199
KEYWORDS
SOURCE Sus scrofa (pig)
ORGANISM Sus scrofa
Mammalia; Euthera; Chordata; Craniata; Vertebrata; Euteleostomi;
Bukaryota; Metazoa; Cetartiodactyla; Suina; Suidae; Sus.
REFERENCE
  1
  Georges,M., Spincemalle,G. and Andersson,L.
  Selecting animals for parentally imprinted traits
  TITLE Patent: WO 0036143-A 130 22-JUN-2000;
  JOURNAL SEGHERSGENTEC N V (BE) ; GEORGES MICHEL (BE) ; UNIV LIEGE (BE) ;
  SPINCEMAILLE GEERT (BE) ; MELICA HB (SE) ; ANDERSSON LEIF (SE)
FEATURES
Location/Qualifiers
source
  1..17
  /organism='Sus scrofa'
  /mol_type='unassigned DNA'
  /db_xref='taxon:9823'
  /note='Polymorphism Tyrosine Hydroxylase gene'

Query Match
Best Local Similarity 3.1%; Score 13.8; DB 1; Length 17;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 5 TCGCGAGGCTGGGCGTG 21
Db 1 TCGCGAGGCGGACCTG 17

RESULT 239
LOCUS AX272560 17 bp RNA linear PAT 29-OCT-2001
DEFINITION Sequence 129 from Patent WO0162911.
ACCESSION AX272560
VERSION AX272560.1 GI:16545297
KEYWORDS Homo sapiens (human)
SOURCE Homo sapiens
Mammalia; Euthera; Chordata; Craniata; Vertebrata; Euteleostomi;
Bukaryota; Metazoa; Primates; Catarrhini; Hominidae; Homo.
REFERENCE
  1
  Jarvis,T., von Carlowitz,I., McSwiggen,J.A., Hamblin,P.A. and
  Ellis,J.H.
  Method and reagent for the inhibition of grid
  TITLE Patent: WO 0162911-A 129 30-AUG-2001;
  JOURNAL RIBOZYME PHARMACEUTICALS, INC. (US) ; GLAXO GROUP LIMITED (GB)
FEATURES
Location/Qualifiers
source
  1..17
  /organism='Homo sapiens'
  /mol_type='unassigned RNA'
  /db_xref='taxon:9606'

Query Match
Best Local Similarity 3.1%; Score 13.8; DB 1; Length 17;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 201 CTCCTGGGACCTGCGG 217
Db 17 CTCCTGGGACCTCGG 1

RESULT 240
LOCUS AX272761 17 bp RNA linear PAT 29-OCT-2001
DEFINITION Sequence 330 from Patent WO0162911.
ACCESSION AX272761
VERSION AX272761.1 GI:16545498
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KEYWORDS Homo sapiens (human)  
SOURCE Homo sapiens  
ORGANISM Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.  
REFERENCE 1  
AUTHORS Jarvis, T., von Carlowitz, I., Mcswiggen, J.A., Hamblin, P.A. and Ellis, J.H.  
TITLE Method and reagent for the inhibition of grid  
JOURNAL Patent: WO 0162911-A 330 30-AUG-2001;  
RIBOZYME PHARMACEUTICALS, INC. (US) ; GLAXO GROUP LIMITED (GB)  
FEATURES  
source  
1. .17  
/organism="Homo sapiens"  
/mol\_type="unassigned RNA"  
/db\_xref="taxon:9606"  
Query Match 3.1%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 2.4e+02;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
Qy 200 CCTCCGGGACCTGCG 216  
|||||  
Db 17 CCTCCGGGACCTCCG 1  
RESULT 241  
AX423613/c  
LOCUS AX423613 17 bp RNA linear PAT 18-JUN-2002  
DEFINITION Sequence 1949 from Patent WO0188124.  
ACCESSION AX423613  
VERSION AX423613.1 GI:21526995  
KEYWORDS  
SOURCE Homo sapiens (human)  
ORGANISM Homo sapiens  
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.  
REFERENCE 1  
AUTHORS Jarvis, T., von Carlowitz, I., Mcswiggen, J.A., McLaughlin, F.G. and Randi, A.M.  
TITLE Method and reagent for the inhibition of erg  
JOURNAL Patent: WO 0188124-A 1949 22-NOV-2001;  
RIBOZYME PHARMACEUTICALS, INC. (US) ; GLAXO GROUP LIMITED (GB)  
FEATURES  
source  
1. .17  
/organism="Homo sapiens"  
/mol\_type="unassigned RNA"  
/db\_xref="taxon:9606"  
Query Match 3.1%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 2.4e+02;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
Qy 124 GGAAAAGCCTCGGCGTG 140  
|||||  
Db 17 GGAAAAGCCTCGGCAG 1  
RESULT 242  
AX429297  
LOCUS AX429297 17 bp DNA linear PAT 21-JUN-2002  
DEFINITION Sequence 2 from Patent EP1201676.  
ACCESSION AX429297  
VERSION AX429297.1 GI:21540603  
KEYWORDS  
SOURCE synthetic construct  
ORGANISM other sequences; artificial sequences.  
REFERENCE 1  
AUTHORS Cook, P.D.  
TITLE Pna-dna-pna chimeric macromolecules  
JOURNAL Patent: EP 1201676-A 2 02-MAY-2002;  
ISIS PHARMACEUTICALS, INC. (US)

FEATURES  
source  
1. .17  
Location/Qualifiers  
/organism="synthetic construct"  
/mol\_type="unassigned DNA"  
/db\_xref="taxon:32630"  
/note="PNA analogue"  
Query Match 3.1%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 2.4e+02;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
Qy 102 TTCTCGCTGACTTTCAG 118  
|||||  
Db 1 TTCTCGCTGCATTTCAG 17  
RESULT 243  
AX688082  
LOCUS AX688082 17 bp DNA linear PAT 31-MAR-2003  
DEFINITION Sequence 814 from Patent EP1281758.  
ACCESSION AX688082  
VERSION AX688082.1 GI:29410780  
KEYWORDS  
SOURCE Homo sapiens (human)  
ORGANISM Homo sapiens  
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.  
REFERENCE 1  
AUTHORS Shannon, M., Gu, Y. and Nguyen, C.T.  
TITLE Four human zinc-finger-containing proteins : mdz3, mdz4, mdz7 and mdz12  
JOURNAL Patent: EP 1281758-A 814 05-FEB-2003;  
Aescmica, Inc. (US)  
FEATURES  
source  
1. .17  
Location/Qualifiers  
/organism="Homo sapiens"  
/mol\_type="unassigned DNA"  
/db\_xref="taxon:9606"  
Query Match 3.1%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 2.4e+02;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
Qy 24 AGGGGTGGTGCCCATTT 40  
|||||  
Db 1 AGGGGTGGTGCCCATTT 17  
RESULT 244  
AX728175/c  
LOCUS AX728175 17 bp DNA linear PAT 08-MAY-2003  
DEFINITION Sequence 5862 from Patent WO03025176.  
ACCESSION AX728175  
VERSION AX728175.1 GI:30507518  
KEYWORDS  
SOURCE Mus musculus (house mouse)  
ORGANISM Mus musculus  
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.  
REFERENCE 1  
AUTHORS Telerman, A., Anson, R. and Tuijnder, M.  
TITLE Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or virus resistance and their use as medicines  
JOURNAL Patent: WO 03025176-A 5862 27-MAR-2003;  
Molecular Engines Laboratories (FR)  
FEATURES  
source  
1. .17  
Location/Qualifiers  
/organism="Mus musculus"  
/mol\_type="unassigned DNA"  
/db\_xref="taxon:10090"  
Query Match 3.1%; Score 13.8; DB 1; Length 17;

Best Local Similarity 88.2%; Pred. No. 2.4e+02;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 368 AGGAAGAGGAACGGAGC 384  
||||| ||||| |||||  
Db 17 AGGAAGGAACGGATC 1

RESULT 245  
AR196106  
LOCUS AR196106 18 bp DNA linear PAT 20-APR-2002  
DEFINITION Sequence 571 from patent US 6350934.  
ACCESSION AR196106  
VERSION AR196106.1 GI:20245543  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unclassified.  
REFERENCE 1 (bases 1 to 18)  
AUTHORS Zwick,M.G., Edington,B.E., McSwiggen,J.A., Merlo,P.Ann.Owens.,  
Guo,L., Skokut,T.A., Young,S.A., Folkerts,O. and Merlo,D.J.  
TITLE Nucleic acid encoding delta-9 desaturase  
JOURNAL Patent: US 6350934-A 571 26-FEB-2002;  
FEATURES  
source 1..18  
/organism="unknown"  
/mol\_type="unassigned DNA"

Query Match 3.1%; Score 13.8; DB 1; Length 18;  
Best Local Similarity 88.2%; Pred. No. 2.5e+02;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 134 CGGCCTGCCGCTTCCA 150  
||||| ||||| |||||  
Db 2 CGGCCTGCCGCGGCCA 18

RESULT 246  
BD225837/c  
LOCUS BD225837 38 bp DNA linear PAT 17-JUL-2003  
DEFINITION Promoter region of mouse and human telomerase RNA component genes.  
ACCESSION BD225837  
VERSION BD225837.1 GI:33035607  
KEYWORDS JP 2002509699-A/40.  
SOURCE synthetic construct  
ORGANISM other sequences; artificial sequences.  
REFERENCE 1 (bases 1 to 38)  
AUTHORS Keith,W.N.  
TITLE Promoter region of mouse and human telomerase RNA component genes  
JOURNAL Patent: JP 2002509699-A 40 02-APR-2002;  
COMMENT CANCER RESEARCH CAMPAIGN TECHNOLOGY LTD  
OS Artificial Sequence  
PN JP 2002509699-A/40  
PD 02-APR-2002  
PF 29-JAN-1999 JP 2000529424  
PR 29-JAN-1998 GB 9801902.9  
PI WILLIAM NICOL KEITH  
PC C12N15/09,A61K31/7105,A61K31/711,A61K35/76,A61K38/00,A61K45/00, PC  
A61K48/00,  
PC A61P35/00,C12N1/15,C12N1/19,C12N1/21,C12N5/10,C12P21/02 PC  
,C12Q1/68//C12N9/12,  
PC (A61K35/76,A61K31:522),C12N15/00,A61K37/02,C12N5/00 CC  
Description of Artificial Sequence:Oligonucleotide FH Key  
Location/Qualifiers  
FT source 1..38  
FT Location/Qualifiers  
source 1..38  
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/mol\_type="genomic DNA"  
/db\_xref="taxon:32630"

Best Local Similarity 3.1%; Score 13.8; DB 1; Length 38;  
Best Local Similarity 72.0%; Pred. No. 3.2e+02;  
Matches 18; Conservative 0; Mismatches 7; Indels 0; Gaps 0;

Qy 222 TGCCTGTGCCAGCCCCCGAACCCCG 246  
||||| ||||| ||||| |||||  
Db 26 TCCAGGCCACCCCTCCGACCCCG 2

RESULT 247  
AX019586/c  
LOCUS AX019586 38 bp DNA linear PAT 07-SEP-2000  
DEFINITION Sequence 40 from Patent WO9938964.  
ACCESSION AX019586  
VERSION AX019586.1 GI:10043500  
KEYWORDS  
SOURCE synthetic construct  
ORGANISM other sequences; artificial sequences.  
REFERENCE 1  
AUTHORS Keith,W.N.  
TITLE Promoter regions of the mouse and human telomerase rna component  
JOURNAL genes  
Patent: WO 9938964-A 40 05-AUG-1999;  
KEITH WILLIAM NICOL (GB); CANCER RES CAMPAIGN TECH (GB)  
FEATURES  
source 1..38  
Location/Qualifiers  
/organism="synthetic construct"  
/mol\_type="unassigned DNA"  
/db\_xref="taxon:32630"  
/note="Oligonucleotide"

Query Match 3.1%; Score 13.8; DB 1; Length 38;  
Best Local Similarity 72.0%; Pred. No. 3.2e+02;  
Matches 18; Conservative 0; Mismatches 7; Indels 0; Gaps 0;

Qy 222 TGCCTGTGCCAGCCCCCGAACCCCG 246  
||||| ||||| ||||| |||||  
Db 26 TCCAGGCCACCCCTCCGACCCCG 2

RESULT 248  
AR264866  
LOCUS AR264866 17 bp DNA linear PAT 10-APR-2003  
DEFINITION Sequence 11 from patent US 6492115.  
ACCESSION AR264866  
VERSION AR264866.1 GI:29693235  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unclassified.  
REFERENCE 1 (bases 1 to 17)  
AUTHORS Guida,M. and Hall,J.  
TITLE Genetic typing of the human cytochrome P450 2A6 gene and related  
materials and methods  
JOURNAL Patent: US 6492115-A 11 10-DEC-2002;  
FEATURES Location/Qualifiers  
source 1..17  
/organism="unknown"  
/mol\_type="genomic DNA"

Query Match 3.0%; Score 13.4; DB 1; Length 17;  
Best Local Similarity 93.3%; Pred. No. 2.6e+02;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 41 TTGTGCTAACCCCTAA 55  
||||| ||||| |||||  
Db 3 TTGTGCTTACCCTAA 17

RESULT 249  
AR264867



LOCUS AR264867 17 bp DNA linear PAT 10-APR-2003  
DEFINITION Sequence 12 from patent US 6492115.  
ACCESSION AR264867  
VERSION AR264867.1 GI:29693236  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unclassified.  
REFERENCE 1 (bases 1 to 17)  
AUTHORS Guida,M. and Hall,J.  
TITLE Genetic typing of the human cytochrome P450 2A6 gene and related materials and methods  
JOURNAL Patent: US 6492115-A 12 10-DEC-2002;  
FEATURES  
source  
1. .17  
/organism="unknown"  
/mol\_type="genomic DNA"  
Query Match 3.0%; Score 13.4; DB 1; Length 17;  
Best Local Similarity 93.3%; Pred. No. 2.6e+02;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
Qy 41 TTGTCTCAACCTAA 55  
Db 3 TTGTCTCACCTAA 17  
|||||  
RESULT 250  
AR327157 17 bp RNA linear PAT 17-AUG-2003  
LOCUS AR327157  
DEFINITION Sequence 4559 from patent US 6566127.  
ACCESSION AR327157  
VERSION AR327157.1 GI:33712965  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unclassified.  
REFERENCE 1 (bases 1 to 17)  
AUTHORS Pavco,P., McSwiggen,J.A., Stinchcomb,D.T. and Escobedo,J.  
TITLE Method and reagent for the treatment of diseases or conditions related to levels of vascular endothelial growth factor receptor  
JOURNAL Patent: US 6566127-A 4559 20-MAY-2003;  
FEATURES  
source  
1. .17  
/organism="unknown"  
/mol\_type="unassigned RNA"  
Query Match 3.0%; Score 13.4; DB 1; Length 17;  
Best Local Similarity 93.3%; Pred. No. 2.6e+02;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
Qy 164 AGCAACACAAAAATG 178  
Db 2 AGCAAGCAAAAAATG 16  
|||||  
RESULT 251  
AX272860/c 17 bp RNA linear PAT 29-OCT-2001  
LOCUS AX272860  
DEFINITION Sequence 429 from Patent WO0162911.  
ACCESSION AX272860  
VERSION AX272860.1 GI:16545597  
KEYWORDS  
SOURCE Homo sapiens (human)  
ORGANISM Homo sapiens  
REFERENCE 1  
AUTHORS Jarvis,T., von Carlowitz,I., Mcswiggen,J.A., Hamblin,P.A. and Ellis,J.H.  
TITLE Method and reagent for the inhibition of grid  
JOURNAL Patent: WO 0162911-A 429 30-AUG-2001;  
RIBOZYME PHARMACEUTICALS, INC. (US) ; GLAXO GROUP LIMITED (GB)

LOCUS AR264867 17 bp DNA linear PAT 10-APR-2003  
DEFINITION Sequence 12 from patent US 6492115.  
ACCESSION AR264867  
VERSION AR264867.1 GI:29693236  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unclassified.  
REFERENCE 1 (bases 1 to 17)  
AUTHORS Guida,M. and Hall,J.  
TITLE Genetic typing of the human cytochrome P450 2A6 gene and related materials and methods  
JOURNAL Patent: US 6492115-A 12 10-DEC-2002;  
FEATURES  
source  
1. .17  
/organism="unknown"  
/mol\_type="genomic DNA"  
Query Match 3.0%; Score 13.4; DB 1; Length 17;  
Best Local Similarity 93.3%; Pred. No. 2.6e+02;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
Qy 41 TTGTCTCAACCTAA 55  
Db 3 TTGTCTCACCTAA 17  
|||||  
RESULT 250  
AR327157 17 bp RNA linear PAT 17-AUG-2003  
LOCUS AR327157  
DEFINITION Sequence 4559 from patent US 6566127.  
ACCESSION AR327157  
VERSION AR327157.1 GI:33712965  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unclassified.  
REFERENCE 1 (bases 1 to 17)  
AUTHORS Pavco,P., McSwiggen,J.A., Stinchcomb,D.T. and Escobedo,J.  
TITLE Method and reagent for the treatment of diseases or conditions related to levels of vascular endothelial growth factor receptor  
JOURNAL Patent: US 6566127-A 4559 20-MAY-2003;  
FEATURES  
source  
1. .17  
/organism="unknown"  
/mol\_type="unassigned RNA"  
Query Match 3.0%; Score 13.4; DB 1; Length 17;  
Best Local Similarity 93.3%; Pred. No. 2.6e+02;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
Qy 164 AGCAACACAAAAATG 178  
Db 2 AGCAAGCAAAAAATG 16  
|||||  
RESULT 251  
AX272860/c 17 bp RNA linear PAT 29-OCT-2001  
LOCUS AX272860  
DEFINITION Sequence 429 from Patent WO0162911.  
ACCESSION AX272860  
VERSION AX272860.1 GI:16545597  
KEYWORDS  
SOURCE Homo sapiens (human)  
ORGANISM Homo sapiens  
REFERENCE 1  
AUTHORS Jarvis,T., von Carlowitz,I., Mcswiggen,J.A., Hamblin,P.A. and Ellis,J.H.  
TITLE Method and reagent for the inhibition of grid  
JOURNAL Patent: WO 0162911-A 429 30-AUG-2001;  
RIBOZYME PHARMACEUTICALS, INC. (US) ; GLAXO GROUP LIMITED (GB)

FEATURES  
source  
1. .17  
/organism="Homo sapiens"  
/mol\_type="unassigned RNA"  
/db\_xref="taxon:9606"  
Query Match 3.0%; Score 13.4; DB 1; Length 17;  
Best Local Similarity 93.3%; Pred. No. 2.6e+02;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
Qy 132 CTCGGCCTGCCGCT 146  
Db 16 CTCGGCCTGCCGCT 2  
|||||  
RESULT 252  
AX273288/c 17 bp RNA linear PAT 29-OCT-2001  
LOCUS AX273288  
DEFINITION Sequence 857 from Patent WO0162911.  
ACCESSION AX273288  
VERSION AX273288.1 GI:16546025  
KEYWORDS  
SOURCE Homo sapiens (human)  
ORGANISM Homo sapiens  
REFERENCE 1  
AUTHORS Jarvis,T., von Carlowitz,I., Mcswiggen,J.A., Hamblin,P.A. and Ellis,J.H.  
TITLE Method and reagent for the inhibition of grid  
JOURNAL Patent: WO 0162911-A 857 30-AUG-2001;  
RIBOZYME PHARMACEUTICALS, INC. (US) ; GLAXO GROUP LIMITED (GB)  
FEATURES  
source  
1. .17  
/organism="Homo sapiens"  
/mol\_type="unassigned RNA"  
/db\_xref="taxon:9606"  
Query Match 3.0%; Score 13.4; DB 1; Length 17;  
Best Local Similarity 93.3%; Pred. No. 2.6e+02;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
Qy 132 CTCGGCCTGCCGCT 146  
Db 15 CTCGGCCTGCCGCT 1  
|||||  
RESULT 253  
AX423145/c 17 bp RNA linear PAT 18-JUN-2002  
LOCUS AX423145  
DEFINITION Sequence 1481 from Patent WO0188124.  
ACCESSION AX423145  
VERSION AX423145.1 GI:21526527  
KEYWORDS  
SOURCE Homo sapiens (human)  
ORGANISM Homo sapiens  
REFERENCE 1  
AUTHORS Jarvis,T., von Carlowitz,I., Mcswiggen,J.A., McLaughlin,F.G. and Randi,A.M.  
TITLE Method and reagent for the inhibition of erg  
JOURNAL Patent: WO 0188124-A 1481 22-NOV-2001;  
RIBOZYME PHARMACEUTICALS, INC. (US) ; GLAXO GROUP LIMITED (GB)  
FEATURES  
source  
1. .17  
/organism="Homo sapiens"  
/mol\_type="unassigned RNA"  
/db\_xref="taxon:9606"  
Query Match 3.0%; Score 13.4; DB 1; Length 17;  
Best Local Similarity 93.3%; Pred. No. 2.6e+02;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 124 GGAAGAGCTCGGCC 138  
Db 16 GGAAGAGCTCGGCC 2

RESULT 254  
AX735544/c  
LOCUS Homo sapiens  
DEFINITION Sequence 1134 from Patent WO03025177.  
ACCESSION AX735544  
VERSION AX735544.1 GI:30514821  
KEYWORDS  
SOURCE  
ORGANISM Homo sapiens (human)  
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE 1  
AUTHORS Telerman,A., Anson,R. and Tuijnder,M.  
TITLE Sequences involved in phenomena of tumour suppression, tumour  
reversion, apoptosis and/or resistance to viruses and the use  
thereof as medicaments  
JOURNAL Patent: WO 03025177-A 1134 27-MAR-2003;  
Molecular Engines Laboratories (FR)  
FEATURES  
source  
1. .17  
/organism="Homo sapiens"  
/mol\_type="unassigned DNA"  
/db\_xref="taxon:9606"

Query Match 3.0%; Score 13.4; DB 1; Length 17;  
Best Local Similarity 93.3%; Pred. No. 2.6e+02;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 97 TGTTCCTCGCTGA 111  
Db 17 TGTTCCTCGCTGA 3

RESULT 255  
AR381406/c  
LOCUS AR381406  
DEFINITION Sequence 2 from patent US 6608036.  
ACCESSION AR381406  
VERSION AR381406.1 GI:40089439  
KEYWORDS  
SOURCE  
ORGANISM Unknown.  
Unclassified.

REFERENCE 1 (bases 1 to 13)  
AUTHORS Gryaznov,S., Pongracz,K. and Matray,T.  
TITLE Oligonucleotide N3', fwardw.P5', thiophosphoramidates: their  
synthesis and administration to treat neoplasms  
JOURNAL Patent: US 6608036-A 2 19-AUG-2003;  
FEATURES  
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Query Match 2.9%; Score 13; DB 1; Length 13;  
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Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 42 TTGTCTAACCCCTA 54  
Db 13 TTGTCTAACCCCTA 1

RESULT 256  
AR381412/c  
LOCUS AR381412  
DEFINITION Sequence 8 from patent US 6608036.  
ACCESSION AR381412

VERSION AR381412.1 GI:40089445  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unclassified.

REFERENCE 1 (bases 1 to 13)  
AUTHORS Gryaznov,S., Pongracz,K. and Matray,T.  
TITLE Oligonucleotide N3', fwardw.P5', thiophosphoramidates: their  
synthesis and administration to treat neoplasms  
JOURNAL Patent: US 6608036-A 8 19-AUG-2003;  
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/mol\_type="genomic DNA"

Query Match 2.9%; Score 13; DB 1; Length 13;  
Best Local Similarity 100.0%; Pred. No. 2.2e+02;  
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 46 CTAACCCCTAACTG 58  
Db 13 CTAACCCCTAACTG 1

RESULT 257  
AX786941/c  
LOCUS AX786941  
DEFINITION Sequence 3 from Patent WO03002077.  
ACCESSION AX786941  
VERSION AX786941.1 GI:32954227  
KEYWORDS  
SOURCE unidentified  
ORGANISM unidentified  
unclassified.

REFERENCE 1  
AUTHORS Styczynski,P. and Ahluwalia,G.S.  
TITLE Reduction of hair growth  
JOURNAL Patent: WO 03002077-A 3 09-JAN-2003;  
THE GILLETTE COMPANY (US)  
FEATURES  
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1. .13  
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Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 46 CTAACCCCTAACTG 58  
Db 13 CTAACCCCTAACTG 1

RESULT 258  
BD071035/c  
LOCUS BD071035  
DEFINITION Modulation of mammalian telomerase by peptide nucleic acids.  
ACCESSION BD071035  
VERSION BD071035.1 GI:22616638  
KEYWORDS JP 2001517929-A/1.  
SOURCE unidentified  
ORGANISM unidentified  
unclassified.

REFERENCE 1 (bases 1 to 13)  
AUTHORS Shay,J.W., Wright,W.E., Piatyszek,M.A., Corey,D. and Norton,J.C.  
TITLE Modulation of mammalian telomerase by peptide nucleic acids  
JOURNAL Patent: JP 2001517929-A 1 09-OCT-2001;  
GERON CORP  
COMMENT OS Unidentified  
PN JP 2001517929-A/1  
PD 09-OCT-2001

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PF 09-APR-1997 JP 1997536487
PR 09-APR-1996 US 08/630019
PI JERRY W SHAY, WOODRING E WRIGHT, MIECZYSLAW A PIATYSZEK, DAVID
COREY,
PI JAMES C NORTON
PC C07K14/00, A61K38/16, C12Q1/68
CC Strandedness: Single;
CC Topology: Linear;
CC /desc = 'peptide nucleic acid (PNA), where (deoxy(ribose- CC
phosphate
linkages are replaced by N-(2-aminoethyl)glycine units linked
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methylenecarbonyl linker'
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1..13
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Query Match 2.9%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 2.2e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 46 CTAACCCCTAAGT 58
DB 13 CTAACCCCTAAGT 1
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RESULT 259
BD071038/c
LOCUS
DEFINITION Modulation of mammalian telomerase by peptide nucleic acids.
ACCESSION BD071038
VERSION BD071038.1 GI:22616641
KEYWORDS JP 2001517929-A/4.
SOURCE unidentified
ORGANISM unclassified.
REFERENCE
1 (bases 1 to 13)
AUTHORS Shay, J.W., Wright, W.E., Piatyszek, M.A., Corey, D. and Norton, J.C.
TITLE Modulation of mammalian telomerase by peptide nucleic acids
JOURNAL Patent: JP 2001517929-A 4 09-OCT-2001;
GERON CORP
COMMENT
OS Unidentified
PN JP 2001517929-A/4
PD 09-OCT-2001
PF 09-APR-1997 JP 1997536487
PR 09-APR-1996 US 08/630019
PI JERRY W SHAY, WOODRING E WRIGHT, MIECZYSLAW A PIATYSZEK, DAVID
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PI JAMES C NORTON
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CC Topology: Linear;
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linkages are replaced by N-(2-aminoethyl)glycine units linked
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CC nucleotide bases via glycine amino N through a CC
methylenecarbonyl linker'
FH Key Location/Qualifiers
FT source 1..13
/organism='Unidentified'.
FEATURES
source
1..13
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Query Match 2.9%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 2.2e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 46 CTAACCCCTAAGT 58
DB 13 CTAACCCCTAAGT 1
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RESULT 259
BD071038/c
LOCUS
DEFINITION Modulation of mammalian telomerase by peptide nucleic acids.
ACCESSION BD071038
VERSION BD071038.1 GI:22616641
KEYWORDS JP 2001517929-A/4.
SOURCE unidentified
ORGANISM unclassified.
REFERENCE
1 (bases 1 to 13)
AUTHORS Shay, J.W., Wright, W.E., Piatyszek, M.A., Corey, D. and Norton, J.C.
TITLE Modulation of mammalian telomerase by peptide nucleic acids
JOURNAL Patent: JP 2001517929-A 4 09-OCT-2001;
GERON CORP
COMMENT
OS Unidentified
PN JP 2001517929-A/4
PD 09-OCT-2001
PF 09-APR-1997 JP 1997536487
PR 09-APR-1996 US 08/630019
PI JERRY W SHAY, WOODRING E WRIGHT, MIECZYSLAW A PIATYSZEK, DAVID
COREY,
PI JAMES C NORTON
PC C07K14/00, A61K38/16, C12Q1/68
CC Strandedness: Single;
CC Topology: Linear;
CC /desc = 'peptide nucleic acid (PNA), where (deoxy(ribose- CC
phosphate
linkages are replaced by N-(2-aminoethyl)glycine units linked
to
CC nucleotide bases via glycine amino N through a CC
methylenecarbonyl linker'
FH Key Location/Qualifiers
FT source 1..13
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Query Match 2.9%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 2.2e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 46 GTCTAACCCCTAAC 56
DB 13 GTCTAACCCCTAAC 1
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RESULT 261
BD071079/c
LOCUS
DEFINITION Modulation of mammalian telomerase by peptide nucleic acids.
ACCESSION BD071079
VERSION BD071079.1 GI:22616682
KEYWORDS JP 2001517929-A/45.
SOURCE unidentified
ORGANISM unclassified.
REFERENCE
1 (bases 1 to 13)
AUTHORS Shay, J.W., Wright, W.E., Piatyszek, M.A., Corey, D. and Norton, J.C.
TITLE Modulation of mammalian telomerase by peptide nucleic acids
JOURNAL Patent: JP 2001517929-A 45 09-OCT-2001;

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Query Match 2.9%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 2.2e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 42 TTGCTAACCCCTA 54
DB 13 TTGCTAACCCCTA 1
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RESULT 260
BD071046/c
LOCUS
DEFINITION Modulation of mammalian telomerase by peptide nucleic acids.
ACCESSION BD071046
VERSION BD071046.1 GI:22616649
KEYWORDS JP 2001517929-A/12.
SOURCE unidentified
ORGANISM unclassified.
REFERENCE
1 (bases 1 to 13)
AUTHORS Shay, J.W., Wright, W.E., Piatyszek, M.A., Corey, D. and Norton, J.C.
TITLE Modulation of mammalian telomerase by peptide nucleic acids
JOURNAL Patent: JP 2001517929-A 12 09-OCT-2001;
GERON CORP
COMMENT
OS Unidentified
PN JP 2001517929-A/12
PD 09-OCT-2001
PF 09-APR-1997 JP 1997536487
PR 09-APR-1996 US 08/630019
PI JERRY W SHAY, WOODRING E WRIGHT, MIECZYSLAW A PIATYSZEK, DAVID
COREY,
PI JAMES C NORTON
PC C07K14/00, A61K38/16, C12Q1/68
CC Strandedness: Single;
CC Topology: Linear;
CC /desc = 'peptide nucleic acid (PNA), where (deoxy(ribose- CC
phosphate
linkages are replaced by N-(2-aminoethyl)glycine units linked
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methylenecarbonyl linker'
FH Key Location/Qualifiers
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Query Match 2.9%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 2.2e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 44 GTCTAACCCCTAAC 56
DB 13 GTCTAACCCCTAAC 1
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RESULT 261
BD071079/c
LOCUS
DEFINITION Modulation of mammalian telomerase by peptide nucleic acids.
ACCESSION BD071079
VERSION BD071079.1 GI:22616682
KEYWORDS JP 2001517929-A/45.
SOURCE unidentified
ORGANISM unclassified.
REFERENCE
1 (bases 1 to 13)
AUTHORS Shay, J.W., Wright, W.E., Piatyszek, M.A., Corey, D. and Norton, J.C.
TITLE Modulation of mammalian telomerase by peptide nucleic acids
JOURNAL Patent: JP 2001517929-A 45 09-OCT-2001;

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GERON CORP
OS Unidentified
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PD 09-OCT-2001
PF 09-APR-1997 JP 1997536487
PR 09-APR-1996 US 08/630019
PI JERRY W SHAY, WOODRING E WRIGHT, MIECZYSLAW A PIATYSZEK, DAVID
PI COREY,
PI JAMES C NORTON
PC C07K14/00,A61K38/16,C12Q1/68
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Best Local Similarity 100.0%; Pred. No. 2.2e+02;
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Qy 42 TTGTCTAACCTA 54
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Db 13 TTGTCTAACCTA 1

RESULT 262
BD071084/c
LOCUS
DEFINITION Modulation of mammalian telomerase by peptide nucleic acids.
ACCESSION BD071084
VERSION BD071084.1 GI:22616687
KEYWORDS JP 2001517929-A/50.
SOURCE unidentified
ORGANISM unclassified.
REFERENCE 1 (bases 1 to 13)
AUTHORS Shay,J.W., Wright,W.E., Piatyszek,M.A., Corey,D. and Norton,J.C.
TITLE Modulation of mammalian telomerase by peptide nucleic acids
JOURNAL GERON CORP
COMMENT
PN JP 2001517929-A/50
PD 09-OCT-2001
PF 09-APR-1997 JP 1997536487
PR 09-APR-1996 US 08/630019
PI JERRY W SHAY, WOODRING E WRIGHT, MIECZYSLAW A PIATYSZEK, DAVID
PI COREY,
PI JAMES C NORTON
PC C07K14/00,A61K38/16,C12Q1/68
CC Strandedness: Single;
CC Topology: Linear;
CC /desc = 'peptide nucleic acid (PNA), where (deoxy(ribose- CC
phosphate
linkages are replaced by N-(2-aminoethyl)glycine units linked
to
nucleotide bases via glycine amino N through a CC
methylenecarbonyl linker'
FH Key Location/Qualifiers
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Query Match 2.9%; Score 13; DB 1; Length 13;
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Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 42 TTGTCTAACCTA 54
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Db 13 TTGTCTAACCTA 1

RESULT 262
BD071084/c
LOCUS
DEFINITION Modulation of mammalian telomerase by peptide nucleic acids.
ACCESSION BD071084
VERSION BD071084.1 GI:22616687
KEYWORDS JP 2001517929-A/50.
SOURCE unidentified
ORGANISM unclassified.
REFERENCE 1 (bases 1 to 13)
AUTHORS Shay,J.W., Wright,W.E., Piatyszek,M.A., Corey,D. and Norton,J.C.
TITLE Modulation of mammalian telomerase by peptide nucleic acids
JOURNAL GERON CORP
COMMENT
PN JP 2001517929-A/50
PD 09-OCT-2001
PF 09-APR-1997 JP 1997536487
PR 09-APR-1996 US 08/630019
PI JERRY W SHAY, WOODRING E WRIGHT, MIECZYSLAW A PIATYSZEK, DAVID
PI COREY,
PI JAMES C NORTON
PC C07K14/00,A61K38/16,C12Q1/68
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CC Topology: Linear;
CC /desc = 'peptide nucleic acid (PNA), where (deoxy(ribose- CC
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methylenecarbonyl linker'
FH Key Location/Qualifiers
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FT /organism='Unidentified'.

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Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 42 TTGTCTAACCTA 54
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Db 13 TTGTCTAACCTA 1

RESULT 262
BD071084/c
LOCUS
DEFINITION Modulation of mammalian telomerase by peptide nucleic acids.
ACCESSION BD071084
VERSION BD071084.1 GI:22616687
KEYWORDS JP 2001517929-A/51.
SOURCE unidentified
ORGANISM unclassified.
REFERENCE 1 (bases 1 to 13)
AUTHORS Shay,J.W., Wright,W.E., Piatyszek,M.A., Corey,D. and Norton,J.C.
TITLE Modulation of mammalian telomerase by peptide nucleic acids
JOURNAL GERON CORP
COMMENT
PN JP 2001517929-A/51
PD 09-OCT-2001
PF 09-APR-1997 JP 1997536487
PR 09-APR-1996 US 08/630019
PI JERRY W SHAY, WOODRING E WRIGHT, MIECZYSLAW A PIATYSZEK, DAVID
PI COREY,
PI JAMES C NORTON
PC C07K14/00,A61K38/16,C12Q1/68
CC Strandedness: Single;
CC Topology: Linear;
CC /desc = 'peptide nucleic acid (PNA), where (deoxy(ribose- CC
phosphate
linkages are replaced by N-(2-aminoethyl)glycine units linked
to
nucleotide bases via glycine amino N through a CC
methylenecarbonyl linker'
FH Key Location/Qualifiers
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FT /organism='Unidentified'.

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Query Match 2.9%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 2.2e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 39 TTTTGTCTAAC 51
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Db 13 TTTTGTCTAAC 1

RESULT 264
BD071088/c
LOCUS
DEFINITION Modulation of mammalian telomerase by peptide nucleic acids.
ACCESSION BD071088
VERSION BD071088.1 GI:22616691
KEYWORDS JP 2001517929-A/54.
SOURCE unidentified
ORGANISM unclassified.
REFERENCE 1 (bases 1 to 13)
AUTHORS Shay,J.W., Wright,W.E., Piatyszek,M.A., Corey,D. and Norton,J.C.
TITLE Modulation of mammalian telomerase by peptide nucleic acids
JOURNAL GERON CORP

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Best Local Similarity 100.0%; Pred. No. 2.2e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 38 TTTTGTCTAAC 50
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Db 13 TTTTGTCTAAC 1

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RESULT 263
BD071085/c
LOCUS
DEFINITION Modulation of mammalian telomerase by peptide nucleic acids.
ACCESSION BD071085
VERSION BD071085.1 GI:22616688
KEYWORDS JP 2001517929-A/51.
SOURCE unidentified
ORGANISM unclassified.
REFERENCE 1 (bases 1 to 13)
AUTHORS Shay,J.W., Wright,W.E., Piatyszek,M.A., Corey,D. and Norton,J.C.
TITLE Modulation of mammalian telomerase by peptide nucleic acids
JOURNAL GERON CORP
COMMENT
PN JP 2001517929-A/51
PD 09-OCT-2001
PF 09-APR-1997 JP 1997536487
PR 09-APR-1996 US 08/630019
PI JERRY W SHAY, WOODRING E WRIGHT, MIECZYSLAW A PIATYSZEK, DAVID
PI COREY,
PI JAMES C NORTON
PC C07K14/00,A61K38/16,C12Q1/68
CC Strandedness: Single;
CC Topology: Linear;
CC /desc = 'peptide nucleic acid (PNA), where (deoxy(ribose- CC
phosphate
linkages are replaced by N-(2-aminoethyl)glycine units linked
to
nucleotide bases via glycine amino N through a CC
methylenecarbonyl linker'
FH Key Location/Qualifiers
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FT /organism='Unidentified'.

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Query Match 2.9%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 2.2e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 39 TTTTGTCTAAC 51
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Db 13 TTTTGTCTAAC 1

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RESULT 264
BD071088/c
LOCUS
DEFINITION Modulation of mammalian telomerase by peptide nucleic acids.
ACCESSION BD071088
VERSION BD071088.1 GI:22616691
KEYWORDS JP 2001517929-A/54.
SOURCE unidentified
ORGANISM unclassified.
REFERENCE 1 (bases 1 to 13)
AUTHORS Shay,J.W., Wright,W.E., Piatyszek,M.A., Corey,D. and Norton,J.C.
TITLE Modulation of mammalian telomerase by peptide nucleic acids
JOURNAL GERON CORP
COMMENT
PN JP 2001517929-A/54
PD 09-OCT-2001
PF 09-APR-1997 JP 1997536487
PR 09-APR-1996 US 08/630019
PI JERRY W SHAY, WOODRING E WRIGHT, MIECZYSLAW A PIATYSZEK, DAVID
PI COREY,
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CC Topology: Linear;
CC /desc = 'peptide nucleic acid (PNA), where (deoxy(ribose- CC
phosphate
linkages are replaced by N-(2-aminoethyl)glycine units linked
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nucleotide bases via glycine amino N through a CC
methylenecarbonyl linker'
FH Key Location/Qualifiers
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Query Match 2.9%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 2.2e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 39 TTTTGTCTAAC 51
| | | | |
Db 13 TTTTGTCTAAC 1

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RESULT 264
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LOCUS
DEFINITION Modulation of mammalian telomerase by peptide nucleic acids.
ACCESSION BD071088
VERSION BD071088.1 GI:22616691
KEYWORDS JP 2001517929-A/54.
SOURCE unidentified
ORGANISM unclassified.
REFERENCE 1 (bases 1 to 13)
AUTHORS Shay,J.W., Wright,W.E., Piatyszek,M.A., Corey,D. and Norton,J.C.
TITLE Modulation of mammalian telomerase by peptide nucleic acids
JOURNAL GERON CORP
COMMENT
PN JP 2001517929-A/54
PD 09-OCT-2001
PF 09-APR-1997 JP 1997536487
PR 09-APR-1996 US 08/630019
PI JERRY W SHAY, WOODRING E WRIGHT, MIECZYSLAW A PIATYSZEK, DAVID
PI COREY,
PI JAMES C NORTON
PC C07K14/00,A61K38/16,C12Q1/68
CC Strandedness: Single;
CC Topology: Linear;
CC /desc = 'peptide nucleic acid (PNA), where (deoxy(ribose- CC
phosphate
linkages are replaced by N-(2-aminoethyl)glycine units linked
to
nucleotide bases via glycine amino N through a CC
methylenecarbonyl linker'
FH Key Location/Qualifiers
FT source 1. .13
FT /organism='Unidentified'.

FEATURES
source
1. .13
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/db_xref="taxon:32644"

Query Match 2.9%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 2.2e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 39 TTTTGTCTAAC 51
| | | | |
Db 13 TTTTGTCTAAC 1

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COMMENT      OS      Unidentified
              PN      JP 2001517929-A/54
              PD      09-OCT-2001
              PF      09-APR-1997 JP 1997536487
              PR      09-APR-1996 US 08/630019
              PI      JERRY W SHAY, WOODRING E WRIGHT, MIECZYSLAW A PIATYSZEK, DAVID
              PI      COREY,
              PI      JAMES C NORTON
              PC      C07K14/00, A61K38/16, C12Q1/68
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              CC      Topology: Linear;
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Query Match      2.9%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 2.2e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      53      TAACGTGAGAGGG 65
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Db      13      TAACGTGAGAGGG 1

RESULT 265
BD071089/c
LOCUS      BD071089      13 bp      DNA      linear      PAT 27-AUG-2002
DEFINITION      Modulation of mammalian telomerase by peptide nucleic acids.
ACCESSION      BD071089
VERSION      BD071089.1 GI:22616692
KEYWORDS      JP 2001517929-A/55.
SOURCE      unidentified
ORGANISM      unclassified.
REFERENCE      1 (bases 1 to 13)
AUTHORS      Shay, J.W., Wright, W.E., Piatyszek, M.A., Corey, D. and Norton, J.C.
TITLE      Modulation of mammalian telomerase by peptide nucleic acids
JOURNAL      Patent: JP 2001517929-A 55 09-OCT-2001;
              GERON CORP

COMMENT      OS      Unidentified
              PN      JP 2001517929-A/55
              PD      09-OCT-2001
              PF      09-APR-1997 JP 1997536487
              PR      09-APR-1996 US 08/630019
              PI      JERRY W SHAY, WOODRING E WRIGHT, MIECZYSLAW A PIATYSZEK, DAVID
              PI      COREY,
              PI      JAMES C NORTON
              PC      C07K14/00, A61K38/16, C12Q1/68
              CC      Strandedness: Single;
              CC      Topology: Linear;
              CC      /desc = 'peptide nucleic acid (PNA), where (deoxy(ribose- CC
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                    linkages are replaced by N-(2-aminoethyl)glycine units linked
                    CC      to
                    CC      nucleotide bases via glycine amino N through a CC
                    CC      methylenecarbonyl linker'
              FH      Key      Location/Qualifiers
              FT      source      1..13
              FT      /organism="Unidentified".

FEATURES     source
              1..13
              /organism="unidentified"

/mol_type="genomic DNA"
/db_xref="taxon:32644"

Query Match      2.9%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 2.2e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      55      ACTGAGAGGGCG 67
              |||||
Db      13      ACTGAGAGGGCG 1

RESULT 266
AR353144
LOCUS      AR353144      16 bp      DNA      linear      PAT 17-AUG-2003
DEFINITION      Sequence 34 from patent US 6592873.
ACCESSION      AR353144
VERSION      AR353144.1 GI:33758857
KEYWORDS      .
SOURCE      Unknown.
ORGANISM      Unknown.
REFERENCE      1 (bases 1 to 16)
AUTHORS      Paul, P.S., Meng, X.-J., Halbur, P., Morozov, I. and Lum, M.A.
TITLE      Polynucleic acids isolated from a porcine reproductive and
              respiratory syndrome virus (PRRSV) and proteins encoded by the
              polynucleic acids
              Patent: US 6592873-A 34 15-JUL-2003;
              Location/Qualifiers
              source      1..16
              /organism="unknown"
              /mol_type="genomic DNA"

Query Match      2.9%; Score 13; DB 1; Length 16;
Best Local Similarity 100.0%; Pred. No. 2.6e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      268      GGGGCTTCTCCGG 280
              |||||
Db      4      GGGGCTTCTCCGG 16

RESULT 267
BD253907/c
LOCUS      BD253907      17 bp      DNA      linear      PAT 17-JUL-2003
DEFINITION      Regulation of repressor genes using nucleic acid molecules.
ACCESSION      BD253907
VERSION      BD253907.1 GI:33063677
KEYWORDS      JP 2002541795-A/1700.
SOURCE      unidentified
ORGANISM      unclassified.
REFERENCE      1 (bases 1 to 17)
AUTHORS      Blatt, L., Zwick, M., Pavco, P. and McSwiggen, J.
TITLE      Regulation of repressor genes using nucleic acid molecules
JOURNAL      Patent: JP 2002541795-A 1700 10-DEC-2002;
              RIBOZYME PHARMACEUTICALS INC
              OS      Eukaryote
              PN      JP 2002541795-A/1700
              PD      10-DEC-2002
              PF      11-APR-2000 JP 2000611654
              PR      12-APR-1999 US 60/129390
              PI      LAWRENCE BLATT, MICHAEL ZWICK, PAMELA PAVCO, JAMES MCSWIGGEN PC
              C12N15/09, A61K38/00, A61P43/00, A61P43/00, C12N5/10, PC
              C12P21/02,
              PC
              C12P21/02, C12P21/02, C12N5/10, C12R1/91, (C12P21/02, PC
              C12R1/91),
              PC      (C12P21/02, C12R1/91), (C12P21/02, C12N15/00, C12N5/00,
              PC      A61K37/02,
              PC      (C12N5/00, C12R1/91)
              CC      Regulation of repressor genes using nucleic acid molecules FH
              Key      Location/Qualifiers

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FT source 1. .17
FT /organism='Eukaryote'.
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source
1. .17
Location/Qualifiers
/organism='unidentified'
/mol_type='genomic DNA'
/db_xref='taxon:32644'
Query Match 2.9%; Score 13; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 2.7e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 2 GGTGGCGAGGGT 14
| | | | | | | | | |
Db 16 GGTGGCGAGGGT 4

RESULT 268
BD266444
LOCUS BD266444 16 bp DNA linear PAT 17-JUL-2003
DEFINITION Universal arrays.
ACCESSION BD266444
VERSION BD266444.1 GI:33076212
KEYWORDS JP 2002539849-A/444.
SOURCE synthetic construct
ORGANISM other sequences; artificial sequences.
REFERENCE 1 (bases 1 to 16)
AUTHORS Fan, J.B., Hirschhorn, J.N., Huang, X., Kaplan, P., Lander, E.S.,
Lockhart, D.J., Ryder, T. and Sklar, P.
TITLE Universal arrays
JOURNAL Patent: JP 2002539849-A 444 26-NOV-2002;
WHITEHEAD INSTITUTE FOR BIOMEDICAL RESEARCH, AFFYMETRIX INC
COMMENT OS Artificial Sequence
PN JP 2002539849-A/444
PD 26-NOV-2002
PR 27-MAR-2000 JP 2000608794
PJ 26-MAR-1999 US 60/126473, 23-JUN-1999 US 60/140359 PJ
JTAN BING FAN, JOEL N HIRSCHHORN, XIAOHUA
HUANG, PAUL KAPLAN, ERIC
PI S LANDER,
PI DAVID J LOCKHART, THOMAS RYDER, PAMELA SKLAR
PC C12Q1/69, C12M1/00, C12N15/09, C12N15/09, C12N15/09, G01N33/53, PC
G01N33/566,
PC G01N37/00, C12N15/00, C12N15/00, C12N15/00
CC Primer
FH Key
FT source 1. .16
FT Location/Qualifiers
/organism='Artificial Sequence'.
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source
1. .16
Location/Qualifiers
/organism='synthetic construct'
/mol_type='genomic DNA'
/db_xref='taxon:32630'
Query Match 2.8%; Score 12.8; DB 1; Length 16;
Best Local Similarity 87.5%; Pred. No. 2.7e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
Qy 24 AGGGTGTGGCCATT 39
| | | | | | | | | |
Db 1 AGGGTGTGGCCAGT 16

RESULT 269
A82083
LOCUS A82083 17 bp DNA linear PAT 21-JAN-2000
DEFINITION Sequence 3 from Patent EP0887423.
ACCESSION A82083
VERSION A82083.1 GI:6731948
KEYWORDS .
SOURCE unidentified
ORGANISM unidentified

unclassified.
1 (bases 1 to 17)
Blasczyk, R.D.
A method for determining the Histocompatibility locus antigen class
II
Patent: EP 0887423-A 3 30-DEC-1998;
BIOTEST AG (DE)
Location/Qualifiers
1. .17
/organism='unidentified'
/mol_type='unassigned DNA'
/db_xref='taxon:32644'
Query Match 2.8%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 2.8e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
Qy 232 AGCCCCCGAACCCGC 247
| | | | | | | | | |
Db 1 AGCGCCCGCACCCGC 16

RESULT 270
BD258356
LOCUS BD258356 17 bp DNA linear PAT 17-JUL-2003
DEFINITION Regulation of repressor genes using nucleic acid molecules.
ACCESSION BD258356
VERSION BD258356.1 GI:33068126
KEYWORDS JP 2002541795-A/6149.
SOURCE unidentified
ORGANISM unidentified.
REFERENCE 1 (bases 1 to 17)
AUTHORS Blatt, L., Zwick, M., Pavco, P. and Mcswiggen, J.
TITLE Regulation of repressor genes using nucleic acid molecules
JOURNAL Patent: JP 2002541795-A 6149 10-DEC-2002;
RIBOZYME PHARMACEUTICALS INC
COMMENT OS Eukaryote
PN JP 2002541795-A/6149
PD 10-DEC-2002
PR 11-APR-2000 JP 2000611654
PJ 12-APR-1999 US 60/129390
PI LAWRENCE BLATT, MICHAEL ZWICK, PAMELA PAVCO, JAMES MCSWIGGEN PC
C12N15/09, A61K38/00, A61K48/00, A61P43/00, C12N5/10, PC
C12P21/02,
PC C12P21/02, C12P21/02//A61K31/711, (C12N5/10, C12R1:91), (C12P21/02, PC
C12R1:91),
PC (C12P21/02, C12R1:91), (C12P21/02, C12R1:91), C12N15/00, C12N5/00,
PC A61K37/02, C12R1:91)
PC C12N5/00, C12R1:91)
CC Regulation of repressor genes using nucleic acid molecules
FH Key
FT source 1. .17
FT Location/Qualifiers
/organism='Eukaryote'.
FEATURES
source
1. .17
Location/Qualifiers
/organism='unidentified'
/mol_type='genomic DNA'
/db_xref='taxon:32644'
Query Match 2.8%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 2.8e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
Qy 97 TGTTCCTCGCTGAC 112
| | | | | | | | | |
Db 2 TTTTCTCTCTGAC 17

RESULT 271
BD273168
LOCUS BD273168 17 bp DNA linear PAT 17-JUL-2003

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```
KEYWORDS      .
SOURCE         synthetic construct
ORGANISM       other sequences; artificial sequences.
REFERENCE      1
AUTHORS        Blatt, L., McSwiggen, J. and Chowrira, B.M.
TITLE          Method and reagent for the modulation and diagnosis of cd20 and
               nogo gene expression
JOURNAL        Patent: WO 0159103-A 27 16-AUG-2001;
               RIBOZYME PHARMACEUTICALS, INC. (US) ; Blatt, Lawrence (US) ;
               McSwiggen, James (US) ; Chowrira, Bharat M. (US)
FEATURES       Location/Qualifiers
               1..17
               /organism="synthetic construct"
               /mol_type="unassigned RNA"
               /db_xref="taxon:32630"
               /note="Nucleic Acid"

Query Match      2.8%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 2.8e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 253 GCCGCGGTCGCGCGG 268
Db 16 GCCGCGGACAGCCGG 1

RESULT 276
AX214616/c
LOCUS          AX214616          17 bp      RNA          linear          PAT 07-SEP-2001
DEFINITION     Sequence 58 from Patent WO0159103.
ACCESSION      AX214616
VERSION        AX214616.1 GI:15524659
KEYWORDS       .
SOURCE         synthetic construct
ORGANISM       other sequences; artificial sequences.
REFERENCE      1
AUTHORS        Blatt, L., McSwiggen, J. and Chowrira, B.M.
TITLE          Method and reagent for the modulation and diagnosis of cd20 and
               nogo gene expression
JOURNAL        Patent: WO 0159103-A 58 16-AUG-2001;
               RIBOZYME PHARMACEUTICALS, INC. (US) ; Blatt, Lawrence (US) ;
               McSwiggen, James (US) ; Chowrira, Bharat M. (US)
FEATURES       Location/Qualifiers
               1..17
               /organism="synthetic construct"
               /mol_type="unassigned RNA"
               /db_xref="taxon:32630"
               /note="Nucleic Acid"

Query Match      2.8%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 2.8e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 363 GCCGCGGAGAGGAA 378
Db 17 GCAGCAGGAGAGCAA 2

RESULT 277
AX214617/c
LOCUS          AX214617          17 bp      RNA          linear          PAT 07-SEP-2001
DEFINITION     Sequence 59 from Patent WO0159103.
ACCESSION      AX214617
VERSION        AX214617.1 GI:15524660
KEYWORDS       .
SOURCE         synthetic construct
ORGANISM       other sequences; artificial sequences.
REFERENCE      1
AUTHORS        Blatt, L., McSwiggen, J. and Chowrira, B.M.
TITLE          Method and reagent for the modulation and diagnosis of cd20 and
               nogo gene expression
JOURNAL        Patent: WO 0159103-A 59 16-AUG-2001;
               RIBOZYME PHARMACEUTICALS, INC. (US) ; Blatt, Lawrence (US) ;
               McSwiggen, James (US) ; Chowrira, Bharat M. (US)
FEATURES       Location/Qualifiers
               1..17
               /organism="synthetic construct"
               /mol_type="unassigned RNA"
               /db_xref="taxon:32630"
               /note="Nucleic Acid"

Query Match      2.8%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 2.8e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 254 GCCGCGGTCGCGCGG 269
Db 17 GCCGCGGACAGCCGG 2

RESULT 279
AX226635/c
LOCUS          AX226635          17 bp      RNA          linear          PAT 10-SEP-2001
DEFINITION     Sequence 7 from Patent WO0157206.
ACCESSION      AX226635
VERSION        AX226635.1 GI:15555776
KEYWORDS       .
SOURCE         synthetic construct
ORGANISM       other sequences; artificial sequences.
REFERENCE      1
AUTHORS        Pattaey, A.R., Jarvis, T., McSwiggen, J., Boohar, R.N. and Holman, P.S.
TITLE          Method and reagent for the inhibition of checkpoint kinase-1 (chk
               1) enzyme
JOURNAL        Patent: WO 0157206-A 7 09-AUG-2001;
               RIBOZYME PHARMACEUTICALS, INC. (US) ; Fattaey, Ali R. (US)
FEATURES       Location/Qualifiers
               1..17
               /organism="synthetic construct"
               /mol_type="unassigned RNA"
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QY 410 CTGAGCTGTGGGACGT 425

RESULT 284			
AX422503/c			
LOCUS	AX422503	17 bp	RNA
DEFINITION	Sequence 839 from Patent WO0188124.		linear
ACCESSION	AX422503		PAT 18-JUN-2002

<p> <b>FEATURES</b>  <b>source</b>  1. .17  /organism="Homo sapiens"  /mol_type="unassigned DNA"  /db_xref="taxon:9606" </p>									
<p> Query Match 2.8%; Score 12.8; DB 1; Length 17;  Best Local Similarity 87.5%; Pred. No. 2.8e+02;  Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0; </p>									
Qy	272	CTTCTCCGGAGGCACC	287						
Db	1	CTTCTCCGGAGCAGC	16						
<p> RESULT 287  AX545225/c 17 bp DNA linear PAT 26-NOV-2002  LOCUS  DEFINITION Sequence 738 from Patent EP1243660.  ACCESSION AX545225  VERSION AX545225.1 GI:25810436  KEYWORDS  SOURCE Homo sapiens (human)  ORGANISM  Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;  Mammalia; Eutheria; Primates; Catarrhini; Homnidae; Homo. </p>									
<p> REFERENCE 1  AUTHORS Zhang, J., Gu, Y. and Nguyen, C.T.  TITLE Human udp-galnac:polypeptide n-acetylglalatosaminyltransferase 10  JOURNAL Patent: Ep 1243660-A 738 25-SEP-2002;  Aeomica, Inc. (US) </p>									
<p> <b>FEATURES</b>  <b>source</b>  1. .17  /organism="Homo sapiens"  /mol_type="unassigned DNA"  /db_xref="taxon:9606" </p>									
<p> Query Match 2.8%; Score 12.8; DB 1; Length 17;  Best Local Similarity 87.5%; Pred. No. 2.8e+02;  Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0; </p>									
Qy	343	GCAGAGGTTACAGGCCTT	358						
Db	17	GCAGGATCAGGCCTT	2						
<p> RESULT 288  AX545226/c 17 bp DNA linear PAT 26-NOV-2002  LOCUS  DEFINITION Sequence 739 from Patent EP1243660.  ACCESSION AX545226  VERSION AX545226.1 GI:25810437  KEYWORDS  SOURCE Homo sapiens (human)  ORGANISM  Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;  Mammalia; Eutheria; Primates; Catarrhini; Homnidae; Homo. </p>									
<p> REFERENCE 1  AUTHORS Zhang, J., Gu, Y. and Nguyen, C.T.  TITLE Human udp-galnac:polypeptide n-acetylglalatosaminyltransferase 10  JOURNAL Patent: Ep 1243660-A 739 25-SEP-2002;  Aeomica, Inc. (US) </p>									
<p> <b>FEATURES</b>  <b>source</b>  1. .17  /organism="Homo sapiens"  /mol_type="unassigned DNA"  /db_xref="taxon:9606" </p>									
<p> Query Match 2.8%; Score 12.8; DB 1; Length 17;  Best Local Similarity 87.5%; Pred. No. 2.8e+02;  Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0; </p>									

Qy 343 CGGAGTTCAGGCCTT 358  
 Db 16 CGCGGATCAGGCCTT 1

RESULT 289  
 AX688081  
 LOCUS AX688081 17 bp DNA linear PAT 31-MAR-2003  
 DEFINITION Sequence 813 from Patent EP1281758.  
 ACCESSION AX688081  
 VERSION AX688081.1 GI:29410779  
 KEYWORDS Homo sapiens (human)  
 SOURCE  
 ORGANISM Homo sapiens  
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
 Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.  
 REFERENCE 1  
 AUTHORS Shannon,M., Gu,Y. and Nguyen,C.T.  
 TITLE Four human zinc-finger-containing proteins : mdz3, mdz4, mdz7 and mdz12  
 JOURNAL Patent: EP 1281758-A 813 05-FEB-2003;  
 Aeomica, Inc. (US)  
 FEATURES  
 source 1..17  
 /organism="Homo sapiens"  
 /mol\_type="unassigned DNA"  
 /db\_xref="taxon:9606"

Query Match 2.8%; Score 12.8; DB 1; Length 17;  
 Best Local Similarity 87.5%; Pred. No. 2.8e+02;  
 Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 24 AGGGGTGGGCCATT 39  
 Db 2 AGGGGTGGGCCATT 17

RESULT 290  
 AX688083  
 LOCUS AX688083 17 bp DNA linear PAT 31-MAR-2003  
 DEFINITION Sequence 815 from Patent EP1281758.  
 ACCESSION AX688083  
 VERSION AX688083.1 GI:29410781  
 KEYWORDS Homo sapiens (human)  
 SOURCE  
 ORGANISM Homo sapiens  
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
 Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.  
 REFERENCE 1  
 AUTHORS Shannon,M., Gu,Y. and Nguyen,C.T.  
 TITLE Four human zinc-finger-containing proteins : mdz3, mdz4, mdz7 and mdz12  
 JOURNAL Patent: EP 1281758-A 815 05-FEB-2003;  
 Aeomica, Inc. (US)  
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 /organism="Homo sapiens"  
 /mol\_type="unassigned DNA"  
 /db\_xref="taxon:9606"

Query Match 2.8%; Score 12.8; DB 1; Length 17;  
 Best Local Similarity 87.5%; Pred. No. 2.8e+02;  
 Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 25 GGGGTGGGCCATT 40  
 Db 1 GGGGTGGGCCATT 16

RESULT 291  
 BD104967  
 LOCUS BD104967 17 bp DNA linear PAT 27-AUG-2002  
 DEFINITION Kit and method for determining HLA type.

ACCESSION BD104967  
 VERSION BD104967.1 GI:22650541  
 KEYWORDS WO 0192572-A/1071.  
 SOURCE synthetic construct  
 ORGANISM synthetic construct  
 other sequences: artificial sequences.  
 REFERENCE 1 (bases 1 to 17)  
 AUTHORS Inoko,H., Kagiya,T., Ichihara,T., Matsumura,Y., Moriya,S. and Nishida,M.  
 TITLE Kit and method for determining HLA type  
 JOURNAL Patent: WO 0192572-A 1071 06-DEC-2001;  
 NISSHINBO INDUSTRIES INC.SYSTEM RESEARCH INC.HIDETOSHI INOKO, TAEKO KAGIYA, TATSUO ICHIHARA, YOSHIYUKI MATSUMURA, SHOGO MORIYA, MICHIO NISHIDA  
 COMMENT OS Artificial Sequence  
 PN WO 0192572-A/1071  
 PD 06-DEC-2001  
 PF 01-JUN-2001 WO 2001JP004662  
 PR 01-JUN-2000 JP 00P 164798  
 PI HIDETOSHI INOKO, TAEKO KAGIYA, TATSUO ICHIHARA, YOSHIYUKI MATSUMURA, SHOGO MORIYA, MICHIO NISHIDA  
 PI SHOGO MORIYA, MICHIO NISHIDA  
 PC C12Q1/68, C12M1/00, C12N15/09, G01N33/53  
 CC Description of Artificial Sequence:capture  
 FH Key Location/Qualifiers  
 FT source 1..17  
 /organism='Artificial Sequence'.  
 FEATURES  
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 /organism="synthetic construct"  
 /mol\_type="genomic DNA"  
 /db\_xref="taxon:32630"

Query Match 2.8%; Score 12.8; DB 1; Length 17;  
 Best Local Similarity 87.5%; Pred. No. 2.8e+02;  
 Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 379 CGGAGCGAGTCCCGC 394  
 Db 16 CGGAGCGAGTCCCGC 1

RESULT 292  
 BD225841/c  
 LOCUS BD225841 25 bp DNA linear PAT 17-JUL-2003  
 DEFINITION Promoter region of mouse and human telomerase RNA component genes.  
 ACCESSION BD225841  
 VERSION BD225841.1 GI:33035611  
 KEYWORDS JP 2002509699-A/44.  
 SOURCE synthetic construct  
 ORGANISM other sequences: artificial sequences.  
 REFERENCE 1 (bases 1 to 25)  
 AUTHORS Keith,W.N.  
 TITLE Promoter region of mouse and human telomerase RNA component genes  
 JOURNAL Patent: JP 2002509699-A 44 02-APR-2002;  
 CANCER RESEARCH CAMPAIGN TECHNOLOGY LTD  
 COMMENT OS Artificial Sequence  
 PN JP 2002509699-A/44  
 PD 02-APR-2002  
 PF 29-JAN-1999 JP 2000529424  
 PR 29-JAN-1998 GB 9801902.9  
 PI WILLIAM NICOL KEITH  
 PC C12N15/09, A61K31/7105, A61K31/711, A61K35/76, A61K38/00, A61K45/00, PC A61K48/00,  
 PC A61P35/00, C12N1/15, C12N1/19, C12N1/21, C12N5/10, C12P21/02 PC ,C12Q1/68//C12N9/12,  
 PC (A61K35/76, A61K31:522), C12N15/00, A61K37/02, C12N5/00 CC  
 Description of Artificial Sequence:Oligonucleotide FH Key  
 Location/Qualifiers  
 FT source 1..25  
 /organism='Artificial Sequence'.  
 FT

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FEATURES
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            /organism="synthetic construct"
            /mol_type="genomic DNA"
            /db_xref="taxon:32630"

Query Match
Best Local Similarity 2.8%; Score 12.8; DB 1; Length 25;
Matches 17; Conservative 0; Mismatches 7; Indels 0; Gaps 0;

QY 223 CGCTGCCCCAGCCCCCGAACCCCG 246
Db 25 CCCAGGCCCCACCTCTCCGCAACCCG 2

RESULT 293
AX019590/c
LOCUS AX019590 25 bp DNA linear PAT 07-SEP-2000
DEFINITION Sequence 44 from Patent WO9938964.
ACCESSION AX019590
VERSION AX019590.1 GI:10043504
KEYWORDS
SOURCE
ORGANISM
    synthetic construct
    synthetic construct
    other sequences; artificial sequences.
REFERENCE
    1
AUTHORS
    Keith,W.N.
TITLE
    Promoter regions of the mouse and human telomerase rna component
JOURNAL
    Patent: WO 9938964-A 44 05-AUG-1999;
    KEITH WILLIAM NICOL (GB); CANCER RES CAMPAIGN TECH (GB)
FEATURES
    source
        1..25
            /organism="synthetic construct"
            /mol_type="unassigned DNA"
            /db_xref="taxon:32630"
            /notes="Oligonucleotide"

Query Match
Best Local Similarity 2.8%; Score 12.8; DB 1; Length 25;
Matches 17; Conservative 0; Mismatches 7; Indels 0; Gaps 0;

QY 223 CGCTGCCCCAGCCCCCGAACCCCG 246
Db 25 CCCAGGCCCCACCTCTCCGCAACCCG 2

RESULT 294
AR063826
LOCUS AR063826 30 bp DNA linear PAT 29-SEP-1999
DEFINITION Sequence 2 from patent US 5846723.
ACCESSION AR063826
VERSION AR063826.1 GI:5993134
KEYWORDS
SOURCE
ORGANISM
    Unknown.
    Unclassified.
REFERENCE
    1 (bases 1 to 30)
AUTHORS
    Kim,N.Woo., Wu,F., Kealey,J.T., Pruzan,R. and Weinrich,S.L.
TITLE
    Methods for detecting the RNA component of telomerase
JOURNAL
    Patent: US 5846723-A 2 08-DEC-1998;
FEATURES
    source
        1..30
            /organism="unknown"
            /mol_type="unassigned DNA"

Query Match
Best Local Similarity 2.8%; Score 12.8; DB 1; Length 30;
Matches 17; Conservative 0; Mismatches 7; Indels 0; Gaps 0;

QY 131 CCTCGGCGCTCGCGCTTCCACCGT 154
Db 5 CCTCTTCTCGGCGCTGAAACGGT 28

RESULT 295
BD023698
LOCUS BD023698 30 bp DNA linear PAT 27-AUG-2002
DEFINITION Method for detecting and inhibiting RNA component of telomerase.
ACCESSION BD023698
VERSION BD023698.1 GI:22564921
KEYWORDS
SOURCE
ORGANISM
    unclassified.
    unclassified.
    1 (bases 1 to 30)
REFERENCE
    Kim,N.W., Wu,F., Kealey,J.T., Pruzan,R. and Weinrich,S.L.
TITLE
    Method for detecting and inhibiting RNA component of telomerase
JOURNAL
    Patent: JP 2001507229-A 2 05-JUN-2001;
    GERON CORP
COMMENT
    EN JP 2001507229-A/2
    PD 05-JUN-2001
    PF 19-DEC-1997 JP 1998529003
    PR 20-DEC-1996 US 08/770564,20-DEC-1996 US 08/770565 PI
    NAM WOO KIM,FRED WU,JAMES T KEALEY,RONALD PRUZAN,SCOTT L PI
    WEINRICH
    PC C12N15/09,A61K9/08,A61K31/7105,A61K45/00,A61K48/00,A61P35/00,
    PC C12N5/10,
    PC C12N9/12,C12Q1/68,C12Q1/68,C12N15/00,C12N5/00 CC
    Strandedness: Single;
    CC Topology: Linear;
    CC /note= 'oligo 14'
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FEATURES
    source
        1..30
            /organism="unidentified"
            /mol_type="genomic DNA"
            /db_xref="taxon:32644"

Query Match
Best Local Similarity 2.8%; Score 12.8; DB 1; Length 30;
Matches 17; Conservative 0; Mismatches 7; Indels 0; Gaps 0;

QY 131 CCTCGGCGCTCGCGCTTCCACCGT 154
Db 5 CCTCTTCTCGGCGCTGAAACGGT 28

RESULT 296
BD225839/c
LOCUS BD225839 38 bp DNA linear PAT 17-JUL-2003
DEFINITION Promoter region of mouse and human telomerase RNA component genes.
ACCESSION BD225839
VERSION BD225839.1 GI:33035609
KEYWORDS
SOURCE
ORGANISM
    synthetic construct
    synthetic construct
    other sequences; artificial sequences.
REFERENCE
    1 (bases 1 to 38)
AUTHORS
    Keith,W.N.
TITLE
    Promoter region of mouse and human telomerase RNA component genes
JOURNAL
    Patent: JP 2002509699-A 42 02-APR-2002;
    CANCER RESEARCH CAMPAIGN TECHNOLOGY LTD
COMMENT
    OS Artificial Sequence
    PN JP 2002509699-A/42
    PD 02-APR-2002
    PF 29-JAN-1999 JP 2000529424
    PR 29-JAN-1998 GB 9801902.9
    PI WILLIAM NICOL KEITH
    PC C12N15/09,A61K31/7105,A61K31/711,A61K35/76,A61K38/00,A61K45/00, PC
    A61K48/00,
    PC A61P35/00,C12N1/15,C12N1/19,C12N1/21,C12N5/10,C12P21/02 PC
    C12Q1/68/C12N9/12,
    PC (A61K35/76,A61K31:522),C12N15/00,A61K37/02,C12N5/00 CC
    Description of Artificial Sequence:Oligonucleotide FH Key
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                    /mol_type='genomic DNA'
                    /db_xref='taxon:32630'

Query Match
Best Local Similarity 2.8%; Score 12.8; DB 1; Length 38;
Matches 17; Conservative 0; Mismatches 7; Indels 0; Gaps 0;

Qy 223 CGCCTGCCAGCCCGCCGAAACCCG 246
Db 25 CCCAGGCCACCCCTCCGCAACCCG 2

RESULT 297
AX019588/c
LOCUS
DEFINITION
Sequence 42 from Patent WO9938964.
ACCESSION
AX019588
VERSION
AX019588.1 GI:10043502
KEYWORDS
synthetic construct
ORGANISM
other sequences; artificial sequences.
REFERENCE
1
AUTHORS
Keith, W.N.
TITLE
Promoter regions of the mouse and human telomerase rna component
genes
JOURNAL
Patent: WO 938964-A 42 05-AUG-1999;
KEITH WILLIAM NICOL (GB); CANCER RES CAMPAIGN TECH (GB)
FEATURES
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            /note='Oligonucleotide'

Query Match
Best Local Similarity 2.8%; Score 12.8; DB 1; Length 38;
Matches 17; Conservative 0; Mismatches 7; Indels 0; Gaps 0;

Qy 223 CGCCTGCCAGCCCGCCGAAACCCG 246
Db 25 CCCAGGCCACCCCTCCGCAACCCG 2

RESULT 298
AR154151
LOCUS
DEFINITION
Sequence 16 from patent US 6238867.
ACCESSION
AR154151
VERSION
AR154151.1 GI:15122204
KEYWORDS
Unknown.
ORGANISM
Unknown.
REFERENCE
1 (bases 1 to 62)
AUTHORS
Roninson, I.B. and Grossman, A.
TITLE
Compositions, methods and kits for identifying naturally occurring
RNA sequences having affinity for RNA-binding proteins
JOURNAL
Patent: US 6238867-A 16 29-MAY-2001;
FEATURES
    source
        Location/Qualifiers
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            /organism='unknown'
            /mol_type='unassigned DNA'

Query Match
Best Local Similarity 2.8%; Score 12.8; DB 1; Length 62;
Matches 17; Conservative 0; Mismatches 7; Indels 0; Gaps 0;

Qy 222 TCGCCTGCCAGCCCGCCGAAACCCG 245
Db 29 TCCAGGCCACCCCTCCGCAACCCG 6

RESULT 300
BD225880/c
LOCUS
DEFINITION
Promoter region of mouse and human telomerase RNA component genes.
ACCESSION
BD225880
VERSION
BD225880.1 GI:33035650
KEYWORDS
JP 2002509699-A/83.
synthetic construct
SOURCE
other sequences; artificial sequences.
REFERENCE
1 (bases 1 to 51)
AUTHORS
Keith, W.N.
TITLE
Promoter region of mouse and human telomerase RNA component genes
JOURNAL
Patent: JP 2002509699-A 83 02-APR-2002;
CANCER RESEARCH CAMPAIGN TECHNOLOGY LTD
COMMENT
OS Artificial Sequence
PN JP 2002509699-A/83
PD 02-APR-2002
PF 29-JAN-1999 JP 2000529424
PR 29-JAN-1998 GB 9801902.9
PI WILLIAM NICOL KEITH
PC
C12N15/09,A61K31/7105,A61K31/711,A61K35/76,A61K38/00,A61K45/00, PC
A61K48/00,
PC A61P35/00,C12N1/15,C12N1/19,C12N1/21,C12N5/10,C12P21/02 PC
,C12Q1/68/C12N9/12,
PC (A61K35/76,A61K31:522),C12N15/00,A61K37/02,C12N5/00 CC
Description of Artificial Sequence: Mutant construct PH Key
Location/Qualifiers
FT source
1..51
/organism='Artificial Sequence'
FT
1..51
Location/Qualifiers
1..51
/organism='synthetic construct'
/mol_type='genomic DNA'
/db_xref='taxon:32630'

Query Match
Best Local Similarity 2.8%; Score 12.6; DB 1; Length 51;
Matches 17; Conservative 0; Mismatches 7; Indels 0; Gaps 0;
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RESULT 305
AX637286/c
LOCUS AX637286 15 bp RNA linear PAT 21-FEB-2003
DEFINITION Sequence 4425 from Patent EP1260586.
ACCESSION AX637286
VERSION AX637286.1 GI:28472900
KEYWORDS
SOURCE
ORGANISM
REFERENCE
AUTHORS
1 Stinchcomb,D.T., Dudycz,L.W., Chowrira,B., Grimm,S., Drenzo,A.,
Karpelesky,A., Draper,K.G., Kieich,K., Matulic-Adamic,J.,
McSwiggen,J.A., Modak,A., Pavco,P., Beigelman,L., Sullivan,S.M.,
Sweedler,D., Thompson,J.D., Tracz,D., Usman,N., Wincott,F.E. and
Woolf,T.
TITLE Method and reagent for inhibiting the expression of disease related
genes
JOURNAL
PATENT: EP 1260586-A 4425 27-NOV-2002;
RIBOZYME PHARMACEUTICALS, INC. (US)
FEATURES
source
1. .15
/organism="unidentified"
/mol_type="unassigned RNA"
/db_xref="taxon:32644"
Query Match 2.7%; Score 12.4; DB 1; Length 15;
Best Local Similarity 92.9%; Pred. No. 2.7e+02;
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
Qy 302 AGAGTTGGCTCTG 315
Db 15 AGAGTTGGACTCTG 2
RESULT 306
AJ840863
LOCUS AJ840863 15 bp DNA linear PLN 22-SEP-2004
DEFINITION Arabidopsis thaliana T-DNA flanking sequence, right border, clone
615B02.
ACCESSION AJ840863.1 GI:52545069
VERSION AJ840863.1
KEYWORDS Right border; T-DNA flanking sequence.
SOURCE Arabidopsis thaliana (Chale cress)
ORGANISM Arabidopsis thaliana
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; eudicotyledons; Core eudicots;
Rosids; eurosids II; Brassicales; Brassicaceae; Arabidopsi.
REFERENCE
AUTHORS
1 Brunaud,V., Balzergue,S., Dubreucq,B., Aubourg,S., Samson,F.,
Chauvin,S., Bechtold,N., Cruaud,C., DeRose,R., Pelletier,G.,
Lepiniec,L., Caboche,M. and Leclarny,A.
TITLE T-DNA integration into the Arabidopsis genome depends on sequences
of pre-insertion sites
JOURNAL EMBO Rep. 3 (12), 1152-1157 (2002)
MEDLINE 22363535
PUBMED 12446565
REFERENCE
2 (bases 1 to 15)
AUTHORS Balzergue,S.
TITLE Direct Submission
JOURNAL Submitted (21-SEP-2004) Balzergue S., UMRGV, INRA/CNRS, 2 rue
Gaston Cremieux, 91057 Evry cedex, FRANCE
COMMENT PCR was performed on DNA from transformants of Arabidopsis thaliana
plants from INRA (Versailles). The DNA fragment(s) resulting from
the PCR were directly sequenced from the left or the right border
to determine the genomic sequence flanking the insertion. T-DNA
derived sequences were removed. Information to order the
corresponding mutant line and a link to a database providing a
graphical display of the insertion site are available at
http://dbgap.versailles.inra.fr/publiclines/. This sequence has
been generated in the framework of the French plant genomics
program 'Genoplante' (http://www.genoplante.com and
http://genoplante-info.infobiogen.fr).

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FEATURES
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1. .15
/organism="Arabidopsis thaliana"
/mol_type="genomic DNA"
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/db_xref="taxon:3702"
/clone="615B02"
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/ecotype="Massilllewska"
/notes="T-DNA flanking sequence
right border"
misc_feature
1. .15
Query Match 2.7%; Score 12.4; DB 1; Length 15;
Best Local Similarity 92.9%; Pred. No. 2.7e+02;
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
Qy 30 GGTGGCCATTTT 43
Db 2 GCGCGCCATTTT 15
RESULT 307
CQ786904/c
LOCUS CQ786904 16 bp DNA linear PAT 24-MAR-2004
DEFINITION Sequence 81 from Patent WO2004021010.
ACCESSION CQ786904
VERSION CQ786904.1 GI:45721896
KEYWORDS synthetic construct
SOURCE synthetic construct
ORGANISM synthetic construct
other sequences; artificial sequences.
REFERENCE
1 Nakamura,Y. and Furukawa,Y.
AUTHORS Method of diagnosing colon and gastric cancers
TITLE Patent: WO 2004021010-A 81 11-MAR-2004;
JOURNAL Oncotherapy Science, Inc. (JP); Japan as represented by the
president of the university o f Tokyo (JP)
FEATURES
source
1. .16
/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/notes="Artificially synthesized S-oligonucleotide"
Query Match 2.7%; Score 12.4; DB 1; Length 16;
Best Local Similarity 92.9%; Pred. No. 2.8e+02;
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
Qy 394 CGCGCGCGCGGATT 407
Db 15 CGCGCGCGCGGAGT 2
RESULT 308
AR228137/c
LOCUS AR228137 16 bp DNA linear PAT 20-DEC-2002
DEFINITION Sequence 38 from patent US 6448003.
ACCESSION AR228137
VERSION AR228137.1 GI:27266883
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE Unclassified.
1 (bases 1 to 16)
AUTHORS Guida,M. and Kurth,J.
TITLE Genotyping the human phenol sulfotransferase 2 gene STP2
JOURNAL Patent: US 6448003-A 38 10-SEP-2002;
FEATURES
source
1. .16
/organism="unknown"
/mol_type="genomic DNA"

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Query Match 2.7%; Score 12.4; DB 1; Length 16;  
Best Local Similarity 92.9%; Pred. No. 2.8e+02;  
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 24 AGGGTGGTGGCCA 37  
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Db 14 AGGGTGGTGGCTA 1

RESULT 309  
AX327120  
LOCUS AX327120 16 bp DNA linear PAT 07-JAN-2002  
DEFINITION Sequence 316 from Patent WO0178894.  
ACCESSION AX327120  
VERSION AX327120.1 GI:18097831  
KEYWORDS .  
SOURCE synthetic construct  
ORGANISM synthetic construct  
other sequences; artificial sequences.  
REFERENCE 1  
AUTHORS Keith, T.  
TITLE Novel human gene relating to respiratory diseases, obesity, and  
inflammatory bowel disease  
JOURNAL Patent: WO 0178894-A 316 25-OCT-2001;  
Genome Therapeutics Corp. (US)  
FEATURES  
source  
1..16  
/organism="synthetic construct"  
/mol\_type="unassigned DNA"  
/db\_xref="taxon:32630"  
/note="Primer"

Query Match 2.7%; Score 12.4; DB 1; Length 16;  
Best Local Similarity 92.9%; Pred. No. 2.8e+02;  
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 137 CCTGGCGCCTTCCA 150  
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Db 2 CCTGGCTCCTTCCA 15

Search completed: August 24, 2005, 14:20:29  
Job time : 3 secs



GenCore version 5.1.6  
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OM nucleic - nucleic search, using sw model

Run on: August 24, 2005, 14:24:45 ; Search time 2 Seconds  
(without alignments)  
4.482 Million cell updates/sec

Title: US-09-436-060A-16  
Perfect score: 451  
Sequence: 1 ggggtcgagggtggcct.....aggactcggctcacacatgc 451

Scoring table: IDENTITY NUC  
Gapop 10.0 , Gapext 0.5

Searched: 479 seqs, 9939 residues  
Total number of hits satisfying chosen parameters: 958

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000  
Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 488 summaries

Database : rng.subdb.\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match %	Length	ID	Description
1	79	17.5	79	1	ADP27647 Human TERC DNA use
2	54	12.0	62	1	AAA08205 Adenovirus nucleot
3	54	12.0	62	1	AAH24816 Human nucleic acid
4	54	12.0	66	1	AAA08204 Adenovirus nucleot
5	54	12.0	66	1	AAH24815 Human nucleic acid
6	46.2	10.2	51	1	AAZ00334 Mutated hTR promot
7	46.2	10.2	51	1	AAZ00335 Mutated hTR promot
8	39.6	8.8	47	1	AAZ00337 Mutated hTR promot
9	39.6	8.8	47	1	AAZ00336 Mutated hTR promot
10	36.4	8.1	47	1	AAZ00339 Mutated hTR promot
11	36	8.0	38	1	AAZ07296 Human telomerase R
12	31.2	6.9	38	1	AAZ07298 Human telomerase R
13	31.2	6.9	38	1	AAZ07297 Human telomerase R
14	31	6.9	31	1	AAV63645 Antisense Oligonuc
15	31	6.9	31	1	AAA37591 Telomerase target
16	31	6.9	31	1	AAAS15462 Human telomerase R
17	31	6.9	31	1	AAAS09472 Antisense oligonuc
18	31	6.9	31	1	ABX10982 Human telomerase a
19	31	6.9	31	1	ADC35648 Human telomerase R
20	31	6.9	31	1	ADG62870 Human telomerase R
21	30	6.7	30	1	AAT11043 Primer for product
22	30	6.7	30	1	AAT10298 RNA component of h
23	30	6.7	30	1	AAV63648 Antisense oligonuc
24	30	6.7	30	1	AAV63649 Antisense oligonuc
25	30	6.7	30	1	AAV41175 RNA component of h
26	30	6.7	30	1	AAV41172 RNA component of h
27	30	6.7	30	1	AAZ23627 Human clone 28-1 t
28	30	6.7	30	1	AAZ23630 Human clone 28-1 t
29	30	6.7	30	1	AAZ23631 Human clone 28-1 t
30	30	6.7	30	1	AAAS15928 Human telomerase p
31	30	6.7	30	1	AAAS09476 Antisense oligonuc
32	30	6.7	30	1	AAAS09475 Antisense oligonuc
33	30	6.7	30	1	ABA91517 Oligonucleotide us

Human telomerase a	30	6.7	30	1	ABX10985	Human telomerase a
Human telomerase a	30	6.7	30	1	ABX10986	Human telomerase a
Human telomerase R	30	6.7	30	1	ADC35652	Human telomerase R
Human telomerase R	30	6.7	30	1	ADC35651	Human telomerase R
Human telomerase R	30	6.7	30	1	ADG62873	Human telomerase R
Human telomerase R	30	6.7	30	1	ADG62874	Human telomerase R
Antisense oligonuc	30	6.3	30	1	AAV63647	Antisense oligonuc
Human clone 28-1 t	30	6.3	30	1	AAZ23629	Human clone 28-1 t
Antisense oligonuc	30	6.3	30	1	AAZ23629	Antisense oligonuc
Human telomerase a	30	6.3	30	1	AAO9474	Human telomerase a
Human telomerase R	30	6.3	30	1	ABX10984	Human telomerase R
Human telomerase R	30	6.3	30	1	ADC35650	Human telomerase R
Human telomerase R	30	6.3	30	1	ADG62872	Human telomerase R
Human telomerase R	28	6.2	28	1	AAV63647	Human telomerase R
RNA component of h	27	6.0	27	1	AAV41193	RNA component of h
PCR primer hTR445	27	6.0	27	1	AAV77130	PCR primer hTR445
Human telomerase R	27	6.0	27	1	ABA95497	Human telomerase R
Human telomerase R	30	5.9	30	1	AAZ07264	Human telomerase R
RNA component of h	28	5.9	28	1	AAT10309	RNA component of h
Primer for product	26	5.8	26	1	AAT11044	Primer for product
RNA component of h	26	5.8	26	1	AAT10304	RNA component of h
RNA component of h	26	5.8	26	1	AAT10299	RNA component of h
Human telomerase P	26	5.8	26	1	AAT58811	Human telomerase P
RNA component of h	26	5.8	26	1	AAV41192	RNA component of h
Telomerase PCR pri	26	5.8	26	1	AAV17033	Telomerase PCR pri
Telomerase PCR pri	26	5.8	26	1	AAV17032	Telomerase PCR pri
Human hTR gene RT-	26	5.8	26	1	AAV19488	Human hTR gene RT-
Human hTR gene RT-	26	5.8	26	1	AAV19489	Human hTR gene RT-
Human telomerase R	26	5.8	26	1	AAV90788	Human telomerase R
Human telomerase R	26	5.8	26	1	AAZ08703	Human telomerase R
Human telomerase R	26	5.8	26	1	AAV77401	Human telomerase R
Human telomerase R	26	5.8	26	1	AAV77402	Human telomerase R
PCR primer hTR S32	26	5.8	26	1	AAV77131	PCR primer hTR S32
PCR primer for Hum	26	5.8	26	1	AAV01541	PCR primer for Hum
PCR primer for Hum	26	5.8	26	1	AAV01542	PCR primer for Hum
Human telomerase R	26	5.8	26	1	AAA88250	Human telomerase R
Human telomerase R	26	5.8	26	1	AAA88249	Human telomerase R
Human telomerase-a	26	5.8	26	1	ABK48024	Human telomerase-a
Human telomerase-a	26	5.8	26	1	ABK48023	Human telomerase-a
Human telomerase (	26	5.8	26	1	AAZ24246	Human telomerase (
Human telomerase R	26	5.8	26	1	AAZ24245	Human telomerase R
Human telomerase R	26	5.8	26	1	ABA95496	Human telomerase R
Human telomerase R	26	5.8	26	1	ADG82593	Human telomerase R
Human telomerase R	26	5.8	26	1	ADG82592	Human telomerase R
Human telomerase R	25	5.5	25	1	AAZ07280	Human telomerase R
Telomerase RNA tar	25	5.5	25	1	AAA37582	Telomerase RNA tar
Human telomerase R	25	5.5	25	1	AAAS15453	Human telomerase R
Human telomerase P	25	5.5	25	1	AAC93100	Human telomerase P
RNA component of h	25	5.5	25	1	AAV41169	RNA component of h
DNA oligonucleotid	24	5.4	24	1	AAV41169	DNA oligonucleotid
Human telomerase t	24	5.3	24	1	AAV89245	Human telomerase t
Human telomerase R	24	5.3	24	1	AAV58807	Human telomerase R
Human telomerase R	24	5.3	24	1	AAV68465	Human telomerase R
Human telomerase R	24	5.3	24	1	AAV68464	Human telomerase R
Human telomerase R	24	5.3	24	1	AAZ07273	Human telomerase R
Human telomerase R	24	5.3	24	1	AAZ07263	Human telomerase R
Human telomerase R	24	5.3	24	1	AAZ07279	Human telomerase R
PNA sequence #25 u	24	5.3	24	1	AAV37567	PNA sequence #25 u
Oligonucleotide #1	24	5.3	24	1	AAAS15445	Oligonucleotide #1
Primer of the inve	24	5.3	24	1	ADQ36831	Primer of the inve
Human telomerase R	24	5.3	24	1	AAZ08704	Human telomerase R
DNA oligonucleotid	23	5.1	23	1	AAV89246	DNA oligonucleotid
PNA sequence #26 u	23	5.1	23	1	AAV37568	PNA sequence #26 u
Oligonucleotide #2	23	5.1	23	1	AAAS15446	Oligonucleotide #2
Human TERC mRNA tr	23	5.1	23	1	ADF93794	Human TERC mRNA tr
Human TERC mRNA tr	23	5.1	23	1	ADF93793	Human TERC mRNA tr
Human TERC mRNA tr	23	5.1	23	1	ADF93795	Human TERC mRNA tr
Human TERC mRNA tr	23	5.1	23	1	ADF93792	Human TERC mRNA tr
Human TERC mRNA tr	23	5.1	23	1	ADF93804	Human TERC mRNA tr
Human TERC mRNA tr	23	5.1	23	1	ADF93801	Human TERC mRNA tr
hTR siNA-target RN	23	5.1	23	1	ADG29526	hTR siNA-target RN
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hTR siNA-target RN	23	5.1	23	1	ADG29525	hTR siNA-target RN

107	23	5.1	23	1	ADG29521	hTR siNA-target RN	c 180	19	4.2	19	1	ADF93564	Human TERC siNA lo
108	23	5.1	23	1	ADG29524	hTR siNA-target RN	181	19	4.2	19	1	ADF93294	Human TERC transcr
109	23	5.1	23	1	ADG29520	hTR siNA-target RN	182	19	4.2	19	1	ADF93299	Human TERC transcr
110	23	5.1	23	1	ADG29522	hTR siNA-target RN	183	19	4.2	19	1	ADF93300	Human TERC transcr
111	23	5.1	23	1	ADP27908	PCR primer to ampl	184	19	4.2	19	1	ADF93306	Human TERC transcr
112	23	5.1	25	1	AAZ07300	Human telomerase R	185	19	4.2	19	1	ADF93314	Human TERC transcr
113	23	5.1	27	1	AAT11045	Primer used for pr	c 186	19	4.2	19	1	ADF93563	Human TERC siNA lo
114	22	4.9	22	1	AAT11033	Antisense oligonuc	187	19	4.2	19	1	ADF93304	Human TERC transcr
115	22	4.9	22	1	AAT11034	Antisense oligonuc	c 188	19	4.2	19	1	ADF93549	Human TERC siNA lo
116	22	4.9	22	1	AAT10288	RNA component of m	c 189	19	4.2	19	1	ADF93567	Human TERC siNA lo
117	22	4.9	22	1	AAT10287	RNA component of m	c 190	19	4.2	19	1	ADF93301	Human TERC transcr
118	22	4.9	22	1	AAT10308	RNA component of h	c 191	19	4.2	19	1	ADF93553	Human TERC siNA lo
119	22	4.9	22	1	AAT58812	Human telomerase P	c 192	19	4.2	19	1	ADF93568	Human TERC siNA lo
120	22	4.9	22	1	AAV63646	Antisense oligonuc	c 193	19	4.2	19	1	ADF93305	Human TERC transcr
121	22	4.9	22	1	AAZ23628	Human clone 28-1 t	194	19	4.2	19	1	ADF93547	Human TERC siNA lo
122	22	4.9	22	1	AAS09473	Antisense oligonuc	c 195	19	4.2	19	1	ADF93548	Human TERC siNA lo
123	22	4.9	22	1	ACC57544	Telomerase PCR pri	c 196	19	4.2	19	1	ADF93550	Human TERC siNA lo
124	22	4.9	22	1	ACC57543	Telomerase PCR pri	c 197	19	4.2	19	1	ADF93555	Human TERC siNA lo
125	22	4.9	22	1	ABX10983	Human telomerase a	c 198	19	4.2	19	1	ADF93556	Human TERC siNA lo
126	22	4.9	22	1	ADC35649	Human telomerase R	c 199	19	4.2	19	1	ADF93291	Human TERC transcr
127	22	4.9	22	1	ADG62871	Human telomerase R	200	19	4.2	19	1	ADF93302	Human TERC transcr
128	22	4.9	22	1	ACC58032	Telomerase PCR pri	201	19	4.2	19	1	ADF93390	Human TERC transcr
129	22	4.9	22	1	ACC58031	Telomerase PCR pri	202	19	4.2	19	1	ADF93295	Human TERC transcr
130	21	4.7	21	1	AAT11058	Primer used for am	c 203	19	4.2	19	1	ADF93545	Human TERC siNA lo
131	21	4.7	21	1	AAT10301	RNA component of n	c 204	19	4.2	19	1	ADF93558	Human TERC siNA lo
132	21	4.7	21	1	AAT58813	Human telomerase P	c 205	19	4.2	19	1	ADF93561	Human TERC siNA lo
133	21	4.7	21	1	ADF93862	Human TERC siRNA,	206	19	4.2	19	1	ADF93297	Human TERC transcr
134	21	4.7	21	1	ADF93867	Human TERC siRNA,	207	19	4.2	19	1	ADF93309	Human TERC transcr
135	21	4.7	21	1	ADF93860	Human TERC siRNA,	208	19	4.2	19	1	ADF93310	Human TERC transcr
136	21	4.7	21	1	ADF93864	Human TERC siRNA,	209	19	4.2	19	1	ADF93292	Human TERC transcr
137	21	4.7	21	1	ADF93866	Human TERC siRNA,	210	19	4.2	19	1	ADF93298	Human TERC transcr
138	21	4.7	21	1	ADF93859	Human TERC siRNA,	211	19	4.2	19	1	ADF93311	Human TERC transcr
139	21	4.7	21	1	ADF93861	Human TERC siRNA,	212	19	4.2	19	1	ADF93313	Human TERC transcr
140	21	4.7	21	1	ADF93865	Human TERC siRNA,	213	19	4.2	19	1	ADF93557	Human TERC siNA lo
141	21	4.7	21	1	ADG30031	hTR-targeted siNA	c 214	19	4.2	19	1	ADF93365	Human TERC siNA lo
142	21	4.7	21	1	ADG30028	hTR-targeted siNA	c 215	19	4.2	19	1	ADF93551	Human TERC siNA lo
143	21	4.7	21	1	ADG30030	hTR-targeted siNA	216	19	4.2	19	1	ADF93293	Human TERC transcr
144	21	4.7	21	1	ADG30036	hTR-targeted siNA	c 217	19	4.2	19	1	ADF93546	Human TERC siNA lo
145	21	4.7	21	1	ADG30035	hTR-targeted siNA	c 218	19	4.2	19	1	ADF93562	Human TERC siNA lo
146	21	4.7	21	1	ADG30029	hTR-targeted siNA	219	19	4.2	19	1	ADF93308	Human TERC transcr
147	21	4.7	21	1	ADG30033	hTR-targeted siNA	c 220	19	4.2	19	1	ADF93552	Human TERC siNA lo
148	21	4.7	21	1	ADG30034	hTR-targeted siNA	c 221	19	4.2	19	1	ADF93566	Human TERC siNA lo
149	21	4.7	21	1	ADQ94244	Short hairpin RNA	222	19	4.2	19	1	ADF93296	Human TERC transcr
150	21	4.7	21	1	ADQ94243	Short hairpin RNA	c 223	19	4.2	19	1	ADF93544	Human TERC siNA lo
151	21	4.7	21	1	ADT96999	siRNA sequence use	c 224	19	4.2	19	1	ADF93554	Human TERC siNA lo
152	20	4.4	20	1	AAT11035	Antisense oligonuc	c 225	19	4.2	19	1	ADF93559	Human TERC siNA lo
153	20	4.4	20	1	AAT11032	Antisense oligonuc	226	19	4.2	19	1	ADO22919	Human telomerase R
154	20	4.4	20	1	AAT10286	RNA component of m	227	19	4.2	19	1	ADO23063	Human telomerase R
155	20	4.4	20	1	AAT10289	RNA component of m	228	19	4.2	19	1	ADO23064	Human telomerase R
156	20	4.4	20	1	AAV71226	Antisense oligonuc	229	19	4.2	19	1	ADO23062	Human telomerase R
157	20	4.4	20	1	AAV41173	RNA component of h	230	19	4.2	19	1	ADO23065	Human telomerase R
158	20	4.4	20	1	AAV41170	RNA component of h	231	19	4.2	19	1	ADP27906	PCR primer to ampl
159	20	4.4	20	1	AAV41174	RNA component of h	c 232	19	4.2	19	1	ADP27907	PCR primer to ampl
160	20	4.4	20	1	AAV41180	RNA component of h	c 233	19	4.2	19	1	ADP78777	2',5'-oligoadenyli
161	20	4.4	20	1	AAZ23632	Human clone 28-1 t	c 234	19	4.2	19	1	ADP87879	2',5'-oligoadenyli
162	20	4.4	20	1	AAZ23636	Human clone 28-1 t	c 235	19	4.2	19	1	ADP87880	2',5'-oligoadenyli
163	20	4.4	20	1	AAZ07301	Human telomerase R	c 236	19	4.2	19	1	ADP87874	2',5'-oligoadenyli
164	20	4.4	20	1	AAZ07275	Human telomerase R	c 237	19	4.2	20	1	AAV68470	Oligo contained ac
165	20	4.4	20	1	AA37583	PNA sequence #41 u	c 238	19	4.2	20	1	AAV68468	Oligo contained ac
166	20	4.4	20	1	AA35454	PNA VIII inhibiti	239	19	4.2	21	1	ACC57540	Short interfering
167	20	4.4	20	1	AA35934	Human telomerase p	240	19	4.2	21	1	ACC57539	Short interfering
168	20	4.4	20	1	AA309477	Antisense oligonuc	c 241	19	4.2	21	1	ADF93815	Human TERC chemica
169	20	4.4	20	1	AA309480	Antisense oligonuc	c 242	19	4.2	21	1	ADF93824	Human TERC chemica
170	20	4.4	20	1	AA309499	Human telomerase p	c 243	19	4.2	21	1	ADF93831	Human TERC chemica
171	19	4.2	19	1	AAV68462	Human telomerase R	c 244	19	4.2	21	1	ADF93812	Human TERC chemica
172	19	4.2	19	1	AAV41176	RNA component of h	c 245	19	4.2	21	1	ADF93825	Human TERC chemica
173	19	4.2	19	1	AA37602	Telomerase target	c 246	19	4.2	21	1	ADF93817	Human TERC chemica
174	19	4.2	19	1	AAZ99775	Nucleotide sequenc	c 247	19	4.2	21	1	ADF93832	Human TERC chemica
175	19	4.2	19	1	AA315473	Human telomerase R	248	19	4.2	21	1	ADF93811	Human TERC chemica
176	19	4.2	19	1	ADF93303	Human TERC transcr	249	19	4.2	21	1	ADF93813	Human TERC chemica
177	19	4.2	19	1	ADF93307	Human TERC transcr	c 250	19	4.2	21	1	ADF93833	Human TERC chemica
178	19	4.2	19	1	ADF93312	Human TERC transcr	c 251	19	4.2	21	1	ADF93816	Human TERC chemica
179	19	4.2	19	1	ADF933560	Human TERC siNA lo	c 252	19	4.2	21	1	ADF93823	Human TERC chemica

C 253	19	4.2	21	1	ADG30042	hTR-targeted s1NA	C 326	14.4	3.2	19	1	AA47637	Forward primer, to
C 254	19	4.2	21	1	ADG30043	hTR-targeted s1NA	C 327	14	3.1	17	1	AAF57369	Murine Cdc25A intr
C 255	19	4.2	21	1	ADG30044	hTR-targeted s1NA	C 328	14	3.1	17	1	AA91135	Fungal pathogenic
C 256	19	4.2	21	1	ACC58028	Short interfering	C 329	13.8	3.1	17	1	AAV81598	Oligonucleotide us
C 257	19	4.2	21	1	ACC58027	Short interfering	C 330	13.8	3.1	17	1	AAV62951	Delta-9 desaturase
C 258	19	4.2	23	1	ADP93829	Human TERC chemica	C 331	13.8	3.1	17	1	ABL46697	Human GRID NCH rib
C 259	19	4.2	23	1	ADP93828	Human TERC chemica	C 332	13.8	3.1	17	1	ABL46496	Human GRID hammerh
C 260	19	4.2	23	1	ADP93827	Human TERC chemica	C 333	13.8	3.1	17	1	ABK19302	Human ERG amberzym
C 261	19	4.2	23	1	ADP93819	Human TERC chemica	C 334	13.8	3.1	17	1	ADA99825	Human MD23 scannin
C 262	19	4.2	23	1	ADP93820	Human TERC chemica	C 335	13.8	3.1	17	1	ACD58382	HCV DNzyme subetr
C 263	19	4.2	23	1	ADP93821	Human TERC chemica	C 336	13.8	3.1	17	1	ACD63046	HCV minus strand D
C 264	19	4.2	23	1	ADP93820	hTR-targeted s1NA	C 337	13.8	3.1	17	1	AC68615	Murine oligonucleo
C 265	19	4.2	23	1	ADG30039	hTR-targeted s1NA	C 338	13.8	3.1	17	1	ADL47097	Human NOGO recepto
C 266	19	4.2	23	1	ADG30038	hTR-targeted s1NA	C 339	13.8	3.1	17	1	ADL51921	Human PTGDR subetr
C 267	18.8	4.2	22	1	AAZ07305	Human telomerase R	C 340	13.8	3.1	17	1	ADL48304	Human IKK-gamma su
C 268	18.4	4.1	20	1	AAZ07291	Mouse telomerase R	C 341	13.8	3.1	17	1	ADL48303	Human IKK-gamma su
C 269	18.4	4.1	20	1	AAZ07294	Mouse telomerase R	C 342	13.8	3.1	17	1	ADM53854	Human GRID mRNA su
C 270	18	4.0	18	1	AAAX18325	PCR primer for tel	C 343	13.8	3.1	17	1	ADM54055	Human GRID mRNA su
C 271	18	4.0	18	1	AAAS37552	PNA sequence #9 us	C 344	13.8	3.1	17	1	ADI85884	HCV DNzyme subetr
C 272	18	4.0	18	1	AAAS15430	PNA 27 inhibiting	C 345	13.8	3.1	18	1	AAAG2696	Granule bound atar
C 273	17.2	3.8	22	1	AAZ07303	Human telomerase R	C 346	13.8	3.1	18	1	AAV35627	SHOX gene exon II
C 274	17	3.8	17	1	AAV41181	RNA component of h	C 347	13.8	3.1	18	1	ADL88552	Probe 52 used to d
C 275	16.4	3.6	20	1	ADK20555	Acyl-coenzyme A sy	C 348	13.8	3.1	18	1	AD42858	DNA oligo to const
C 276	16.4	3.6	20	1	ADK20489	Acyl-coenzyme A sy	C 349	13.8	3.1	18	1	AD42858	Human telomerase R
C 277	16.4	3.6	20	1	ADK20636	Acyl-coenzyme A sy	C 350	13.4	3.0	17	1	ABL47224	Human GRID Amberzy
C 278	16.4	3.6	21	1	AAV27886	Human telomerase g	C 351	13.4	3.0	17	1	ABL46796	Human GRID NCH rib
C 279	16.2	3.6	21	1	AAQ43257	Sequence encoding	C 352	13.4	3.0	17	1	ABK18834	Human ERG DNzyme
C 280	16.2	3.6	21	1	AAQ43258	Sequence encoding	C 353	13.4	3.0	17	1	AAAL44028	Human cytochrome p
C 281	16.2	3.6	21	1	AAQ71457	Rx 2.4 proralin	C 354	13.4	3.0	17	1	AAAL44029	Human cytochrome p
C 282	16.2	3.6	21	1	AAAX18326	PCR primer for tel	C 355	13.4	3.0	17	1	ACA07669	NFKB sub-unit modu
C 283	16	3.5	16	1	AAAT89247	DNA oligonucleotid	C 356	13.4	3.0	17	1	ABZ66556	Human HIV DNA zyme
C 284	16	3.5	16	1	AAAS37569	PNA sequence #27 u	C 357	13.4	3.0	17	1	ABZ66567	Human HIV amberzym
C 285	16	3.5	16	1	AAAS15447	Oligonucleotide #3	C 358	13.4	3.0	17	1	ACD64058	HCV minus strand D
C 286	16	3.5	20	1	AAZ07277	Human telomerase R	C 359	13.4	3.0	17	1	ACD58611	HCV DNzyme subetr
C 287	15.8	3.5	20	1	ADH56499	Human tumour endot	C 360	13.4	3.0	17	1	ADI48631	Human tumour suppr
C 288	15.8	3.5	20	1	ADH56566	Human hypothetical	C 361	13.4	3.0	17	1	ADI48631	Human GRID mRNA su
C 289	15.8	3.5	79	1	ADP27647	Human TERC DNA use	C 362	13.4	3.0	17	1	ADI86392	HCV DNzyme subetr
C 290	15.4	3.4	17	1	AAAT89233	Peptide nucleic ac	C 363	13	2.9	13	1	AAAT89228	Peptide nucleic ac
C 291	15.4	3.4	17	1	AAZ87074	PCR primer for hum	C 364	13	2.9	13	1	AAAT89236	Peptide nucleic ac
C 292	15.4	3.4	20	1	ADK20650	Acyl-coenzyme A sy	C 365	13	2.9	13	1	AAAT89225	Peptide nucleic ac
C 293	15.4	3.4	20	1	ADK20828	Acyl-coenzyme A sy	C 366	13	2.9	13	1	AAZ08815	Human RERF-LC-A1 h
C 294	15.2	3.4	20	1	AAAC67060	Rat/human Glutamat	C 367	13	2.9	13	1	AAA37544	PNA sequence #1 us
C 295	15.2	3.4	20	1	ADK21153	Acyl-coenzyme A sy	C 368	13	2.9	13	1	AAA37594	PNA sequence #52 u
C 296	15	3.3	15	1	AAAT89229	Peptide nucleic ac	C 369	13	2.9	13	1	AAA37598	PNA sequence #56 u
C 297	15	3.3	15	1	AAAT89248	DNA oligonucleotid	C 370	13	2.9	13	1	AAA37593	PNA sequence #51 u
C 298	15	3.3	15	1	AAAT89226	Peptide nucleic ac	C 371	13	2.9	13	1	AAA37588	Antisense sequence
C 299	15	3.3	15	1	AAV41177	RNA component of h	C 372	13	2.9	13	1	AAA37597	PNA sequence #55 u
C 300	15	3.3	15	1	AAAS37570	PNA sequence #28 u	C 373	13	2.9	13	1	AAA37555	PNA sequence #52 u
C 301	15	3.3	15	1	AAAS37587	Antisense sequence	C 374	13	2.9	13	1	AAA37547	PNA sequence #4 us
C 302	15	3.3	15	1	AAAS37545	PNA sequence #2 us	C 375	13	2.9	13	1	AAAS15468	PNA 12 inhibiting
C 303	15	3.3	15	1	AAAS37548	PNA sequence #5 us	C 376	13	2.9	13	1	AAAS15426	PNA 5/XII inhibiti
C 304	15	3.3	15	1	AAAS15427	PNA XIII inhibiti	C 377	13	2.9	13	1	AAAS15433	PNA 6/X inhibiting
C 305	15	3.3	15	1	AAAS15448	Oligonucleotide #4	C 378	13	2.9	13	1	AAAS15469	PNA 13 inhibiting
C 306	15	3.3	15	1	AAAS15424	PNA VII inhibiting	C 379	13	2.9	13	1	AAAS15465	PNA 3 inhibiting h
C 307	15	3.3	15	1	AAAS15458	Phosphorothioate (	C 380	13	2.9	13	1	AAAS15423	PNA 8/VI inhibiti
C 308	15	3.3	15	1	AAAS15927	Human telomerase p	C 381	13	2.9	13	1	AAAS15459	Phosphorothioate (
C 309	15	3.3	15	1	AAAS15931	Human telomerase p	C 382	13	2.9	13	1	AAAS15464	PNA 2 inhibiting h
C 310	15	3.3	15	1	AAAS15932	Human telomerase p	C 383	13	2.9	13	1	AAH26730	Phosphoramidate-li
C 311	15	3.3	15	1	ADP87875	2',5'-oligoadenyl	C 384	13	2.9	13	1	AAH26734	Phosphoramidate-li
C 312	15	3.3	15	1	ADP87878	2',5'-oligoadenyl	C 385	13	2.9	13	1	AAAS15937	Human telomerase p
C 313	15	3.3	18	1	AAV27891	Human telomerase a	C 386	13	2.9	13	1	AAAS15921	Human telomerase p
C 314	15	3.3	20	1	ADK20128	Acyl-coenzyme A sy	C 387	13	2.9	13	1	AAAS15926	Human telomerase p
C 315	15	3.3	20	1	ADK20144	Acyl-coenzyme A sy	C 388	13	2.9	13	1	AAAS15930	Human telomerase p
C 316	14.8	3.3	18	1	AAH82232	Influenza virus PA	C 389	13	2.9	13	1	AAAS15935	Human telomerase p
C 317	14.8	3.3	18	1	AAZ24498	H. capsulatum 5.8S	C 390	13	2.9	13	1	AAAS15922	Human telomerase p
C 318	14.6	3.2	18	1	AAZ23265	Japanese type C he	C 391	13	2.9	13	1	AAAS15923	Human telomerase p
C 319	14.4	3.2	16	1	ADD00949	Human Jagged 2 for	C 392	13	2.9	13	1	AAAS15925	Human telomerase p
C 320	14.4	3.2	16	1	ADH62909	Human Jagged 2 DNA	C 393	13	2.9	13	1	AAAS15924	Human telomerase p
C 321	14.4	3.2	16	1	ADH57064	PCR primer used to	C 394	13	2.9	13	1	AAAS15938	Human telomerase p
C 322	14.4	3.2	17	1	ACA06327	NFKB sub-unit modu	C 395	13	2.9	13	1	AAF81193	Thiophosphoramidat
C 323	14.4	3.2	17	1	ACA06326	NFKB sub-unit modu	C 396	13	2.9	13	1	AAF81195	Thiophosphoramidat
C 324	14.4	3.2	17	1	ADI83554	HCV DNzyme subetr	C 397	13	2.9	13	1	AD50105	Oligonucleotide #1
C 325	14.4	3.2	18	1	AAA63120	Antisense oligonuc	C 398	13	2.9	13	1	ADB68045	Match phosphorothi

C 399	13	2.9	13	1	ADB68046	Match 2'-O-methyl	C 472	12.8	2.8	17	1	ADM58919	Hepatitis B virus
C 400	13	2.9	13	1	ABZ58497	Telomerase inhibit	473	12.8	2.8	17	1	AD183671	HCV DNzyme substr
C 401	13	2.9	13	1	ADM46660	Telomerase templat	C 474	12.8	2.8	17	1	AD186393	HCV DNzyme substr
C 402	13	2.9	13	1	ADO21607	Labelled nucleic a	475	12.8	2.8	17	1	AD184179	HCV DNzyme substr
C 403	13	2.9	13	1	ADO21606	Labelled nucleic a	C 476	12.8	2.8	17	1	AD186509	HCV DNzyme substr
C 404	13	2.9	13	1	ADS32750	Human G/C-rich (Sp	C 477	12.8	2.8	17	1	ADN44083	Mutant cell identi
C 405	13	2.9	14	1	AAV93815	Human B-raf target	C 478	12.8	2.8	17	1	ADN44082	Mutant cell identi
C 406	13	2.9	14	1	ADP87937	2',5'-oligoadenyl	C 479	12.8	2.8	17	1	ADO80740	Porcine TSSC5 intr
C 407	13	2.9	15	1	AA898334	Galanin receptor g	C 480	12.8	2.8	17	1	ADO92762	Androgen receptor
C 408	13	2.9	15	1	AA897507	Human LCAT gene po	C 481	12.8	2.8	25	1	AA207300	Human telomerase R
C 409	13	2.9	15	1	ADG98425	Human CETP gene al	C 482	12.8	2.8	30	1	AAV41169	RNA component of h
C 410	13	2.9	16	1	AAT14404	PRRSV sequencing p	C 483	12.8	2.8	38	1	AAZ07298	Human telomerase R
C 411	13	2.9	17	1	AAFO1709	Hammerhead ribozym	484	12.8	2.8	62	1	AAA08205	Adenovirus nucleot
C 412	13	2.9	17	1	ABZ62076	Hammerhead ribozym	485	12.8	2.8	62	1	AAH24816	Human nucleic acid
C 413	12.8	2.8	16	1	AAT80369	Oligo HCV-222, mul	C 486	12.8	2.8	66	1	AAH08204	Adenovirus nucleot
C 414	12.8	2.8	16	1	RAC73638	Reverse primer #14	C 487	12.8	2.8	66	1	AAH24815	Human nucleic acid
C 415	12.8	2.8	16	1	ABS65953	Inhibitory oligonu	C 488	12.6	2.8	15	1	ADG98448	Human CETP gene al
C 416	12.8	2.8	16	1	ABT34275	Serotonin receptor							
C 417	12.8	2.8	16	1	ADN14388	Pyrimidine nucleot							
C 418	12.8	2.8	17	1	AAT12444	Antiviral phosphor							
C 419	12.8	2.8	17	1	AAT12443	Antiviral phosphor							
C 420	12.8	2.8	17	1	AA62953	Delta-9 desaturase							
C 421	12.8	2.8	17	1	AAV20570	Human BRCA1 probe							
C 422	12.8	2.8	17	1	AAV04779	Group-specific amp							
C 423	12.8	2.8	17	1	AAV00304	Human leukocyte an							
C 424	12.8	2.8	17	1	AAV55127	C/EBP-beta antisen							
C 425	12.8	2.8	17	1	AAA34574	Human adenosine re							
C 426	12.8	2.8	17	1	AAF20696	Human C/EBP polynu							
C 427	12.8	2.8	17	1	AAF06158	Hammerhead ribozym							
C 428	12.8	2.8	17	1	AAA70569	Shear Stress Respo							
C 429	12.8	2.8	17	1	AAH94582	Human Chk1 ribozym							
C 430	12.8	2.8	17	1	AAH95534	Human Chk1 ribozym							
C 431	12.8	2.8	17	1	ABK00059	Human NOGO Hammer							
C 432	12.8	2.8	17	1	ABK00027	Human NOGO Hammer							
C 433	12.8	2.8	17	1	ABK01810	Human NOGO Zinzyme							
C 434	12.8	2.8	17	1	ABK00058	Human NOGO Hammer							
C 435	12.8	2.8	17	1	ABL46698	Human GRID NCH rib							
C 436	12.8	2.8	17	1	ABV85745	Human PP-GANTase 1							
C 437	12.8	2.8	17	1	ABV85746	Human PP-GANTase 1							
C 438	12.8	2.8	17	1	ABK25391	Male-sterile plant							
C 439	12.8	2.8	17	1	ABK25392	Male-sterile plant							
C 440	12.8	2.8	17	1	ABK18192	Human ERG hammehe							
C 441	12.8	2.8	17	1	ABK18191	Human ERG hammehe							
C 442	12.8	2.8	17	1	ABV90003	Human POSHL1 scann							
C 443	12.8	2.8	17	1	ABV90002	Human POSHL1 scann							
C 444	12.8	2.8	17	1	ABL31582	Human HLA genotypi							
C 445	12.8	2.8	17	1	ACN09761	WNV minus strand I							
C 446	12.8	2.8	17	1	ACN04592	WNV Zinzyme substr							
C 447	12.8	2.8	17	1	ACN14999	WNV minus strand A							
C 448	12.8	2.8	17	1	ACN00415	WNV Hammerhead Rib							
C 449	12.8	2.8	17	1	ACN03272	WNV Inozyme substr							
C 450	12.8	2.8	17	1	ACN14010	WNV minus strand D							
C 451	12.8	2.8	17	1	ADA99826	Human MDZ3 scannin							
C 452	12.8	2.8	17	1	ADA99824	Human MDZ3 scannin							
C 453	12.8	2.8	17	1	ABZ62075	Human H-Ras DNazym							
C 454	12.8	2.8	17	1	ABZ65412	Human HER2 DNazyme							
C 455	12.8	2.8	17	1	ABZ61267	Human H-Ras DNazym							
C 456	12.8	2.8	17	1	ABZ64563	Human HER2 DNazyme							
C 457	12.8	2.8	17	1	ABZ61388	Human H-Ras DNazym							
C 458	12.8	2.8	17	1	ACD59623	HCV DNzyme substr							
C 459	12.8	2.8	17	1	ACD64287	HCV minus strand D							
C 460	12.8	2.8	17	1	ACD64059	HCV inozyme substr							
C 461	12.8	2.8	17	1	ACD52324	HBV inozyme substr							
C 462	12.8	2.8	17	1	ADFI3468	SNX9 (Sorting Nexi							
C 463	12.8	2.8	17	1	ABZ96390	Human C/EBP antise							
C 464	12.8	2.8	17	1	ADL48687	Human IKK-gamma su							
C 465	12.8	2.8	17	1	ADL51562	Human PTGDR substr							
C 466	12.8	2.8	17	1	ADL51527	Human PTGDR substr							
C 467	12.8	2.8	17	1	ADM09504	Human NOGO recepto							
C 468	12.8	2.8	17	1	ADL47866	Human IKK-gamma su							
C 469	12.8	2.8	17	1	ADM45056	Human GRID mRNA su							
C 470	12.8	2.8	17	1	ADK20299	Human C/EBP DNA f							
C 471	12.8	2.8	17	1	ADK13270	Human glioma endot							

## ALIGNMENTS

## RESULT 1

ADP27647

ID ADP27647 standard; DNA; 79 BP.

XX

AC ADP27647;

XX

DT 26-AUG-2004 (first entry)

XX

Human TERC DNA used as a cancer prognostic marker SeqID 84.

DE

XX

TERC; human; PCR amplicon; ds; prognostic marker; EGFR;

epidermal growth factor receptor; cancer; gene expression profiling;

microarray; head and neck cancer; colon cancer; metastatic spread;

neoplastic disease.

KW

KW

XX

OS Homo sapiens.

PN WO2004046386-A1.

XX

PD 03-JUN-2004.

XX

PF 14-NOV-2003; 2003WO-US036777.

XX

PR 15-NOV-2002; 2002US-0427090P.

XX

(GENO-) GENOMIC HEALTH INC.

(VALL-) VALL HEBRON UNIV HOSPITAL.

PA

Baker JB, Cronin MT, Shak S, Baselga J;

XX

WPI; 2004-420643/39.

DR

XX

Prognosing a patient with EGFR-expressing colon cancer comprises

PT subjecting a sample comprising EGFR-expressing cancer cells to

PT quantitative analysis of the expression level of the RNA transcript of at

PT least one gene e.g., CD44v3.

XX

PS Claim 55; SEQ ID NO 84; 113pp; English.

XX

This invention relates to a novel method concerning prognostic markers

CC associated with EGFR (epidermal growth factor receptor) positive cancer.

CC Specifically, it refers to a gene expression profiling method that can

CC provide a prediction as to whether a patient is likely to respond well to

CC treatment with an EGFR inhibitor. The present invention describes the

CC quantitative analysis of the expression level of the RNA transcript of at

CC least one gene selected from the group of CD44v3, CD44v6, DR5, GROI,

CC KRT17, IAMC2 or their products thereof. It further provides a cDNA

CC microarray containing named genes that represent prognostic transcripts

CC which are useful for determining whether a patient diagnosed with an EGFR

CC -expressing head or neck cancer or colon cancer exhibits elevated or

CC decreased expression levels of these genes compared to normal. As such,



```
QY      1 GGGTTGCGGAGGTGGGCTGGGAGGGTGGTGCCATTTTGTCTAACCCCTA 54
      |||
      61 GGGTTGCGGAGGTGGGCTGGGAGGGTGGTGCCATTTTGTCTAACCCCTA 8

RESULT 4
AAA08204
ID      AAA08204 standard; DNA; 66 BP.
XX
AC      AAA08204;
XX
DT      28-JUN-2000 (first entry)
XX
DE      Adenovirus nucleotide sequence SEQ ID NO:19.
XX
KW      Human; telomerase; hTR; telomeric repeat amplification protocol; TRAP;
KW      identification; detection; quantification; cancer; metastasis; ss.
XX
OS      Mastadenovirus.
XX
PN      US6037126-A.
XX
PD      14-MAR-2000.
XX
PF      12-JUN-1997; 97US-00873709.
XX
PR      12-JUN-1997; 97US-00873709.
XX
PA      (INVI-) INVITRO DIAGNOSTICS INC.
XX
PI      Grossman A;
XX
PS      WPI; 2000-282223/24.
XX
PT      Pair of RNA molecules for detecting telomerase, useful for diagnosis of
PT      cancer or metastases, can be ligated when bound to telomerase subunit
PT      protein.
XX
PS      Example 2; Col 23; 32bp; English.
XX
CC      The present invention describes a pair of RNA molecules (R1, R2) for
CC      detecting a first subunit protein (I) of telomerase. R1 and R2 both bind
CC      to (I) and have formulae 5'-A-B-C-3' (R1) 5'-D-E-F-3' (R2) where: A and F
CC      = RNA segment of 10 to 10000 nucleotides (nt) that together are
CC      replicated by RNA replicase; B and E = RNA segments of 10 to 250 nt from
CC      the Y region of human telomerase and bind specifically to (I); C and D =
CC      RNA segments of 1 to 10000 nt which can be ligated together. Ligation of
CC      C and D produces R3 of formula 5'-A-B-C-D-E-F-3' (R3) with E and B bound
CC      to (I). Replication of R3 by RNA replicase indicates presence of (I).
CC      Also described are: (1) method for detecting (I) using R1 and R2; (2) kit
CC      for this process containing R1, R2, ligase and an amplification system;
CC      and (3) method for making R1 and R2 by transcription from appropriate
CC      DNA. R1 and R2 are used to detect and quantify telomerase, particularly
CC      for diagnosis of cancer and for detection of metastases. R1 and R2
CC      provide an assay that does not require expensive equipment or highly
CC      trained personnel, and is suitable for automation. The present sequence
CC      represents an oligonucleotide used in the exemplification of the present
CC      invention
XX
SQ      Sequence 66 BP; 10 A; 11 C; 28 G; 17 T; 0 U; 0 Other;

      Query Match      12.0%; Score 54; DB 1; Length 66;
      Best Local Similarity 100.0%; Pred. No. 0.77;
      Matches 54; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 GGGTTGCGGAGGTGGGCTGGGAGGGTGGTGCCATTTTGTCTAACCCCTA 54
      |||
      6 GGGTTGCGGAGGTGGGCTGGGAGGGTGGTGCCATTTTGTCTAACCCCTA 59

RESULT 5
AAH24815
ID      AAH24815 standard; DNA; 51 BP.
XX
AC      AAH24815;
XX
DT      22-OCT-1999 (first entry)
XX
DE      Mutated hTR promoter fragment containing construct 29111 (mRCE).
```

```
ID      AAH24815 standard; RNA; 66 BP.
XX
AC      AAH24815;
XX
DT      06-AUG-2001 (first entry)
XX
DE      Human nucleic acid sequence derived from Y-1 domain of telomerase.
XX
KW      RNA-binding protein; RBP; RNA replicase; RNA identification; telomerase;
KW      ss.
XX
OS      Homo sapiens.
XX
PN      US6238867-B1.
XX
PD      29-MAY-2001.
XX
PF      22-FEB-1999; 99US-00255464.
XX
PR      23-FEB-1998; 98US-0075495P.
XX
PA      (INVI-) INVITRO DIAGNOSTICS INC.
XX
PI      Roninson IB, Grossman A;
XX
PS      WPI; 2001-366472/38.
XX
PT      New ribonucleic acids useful for identifying naturally occurring RNA
PT      sequences having affinity for RNA-binding protein having protein and RNA
PT      components.
XX
PS      Example 2; Col 26; 36pp; English.
XX
CC      The specification describes a first RNA (RNA1) and a second RNA (RNA2)
CC      for use in binding an RNA-binding protein (RBP) having protein and RNA
CC      components. RNA1 has the formula 5'-A-B-C-3', where A is section having
CC      10-100,000 nucleotides and is can be received by an RNA replicase and
CC      with another DNA sequence, F, being replicated; B is section having 10-
CC      3,000 nucleotides which have affinity to one consensus sequence of the
CC      RBP and which can bind to the protein component; C is section having
CC      about 1-20 nucleotides and which can be ligated to D of the second RNA
CC      molecule. RNA2 has the formula 5'-D-E-F-3', where D is section having 1-
CC      20 nucleotides and which can be ligated to C; E is section 10-3,000
CC      nucleotides which have affinity to second consensus sequence of the RBP
CC      and which can bind to the protein component; F is section having 10-
CC      100,000 nucleotides which can be received by an RNA replicase and with A
CC      being replicated. RNA1 and RNA2 are capable of forming a third RNA (RNA3)
CC      of formula 5'-A-B-C-D-E-F-3'. The method is useful for the identification
CC      and characterization of RNA sequences having specific affinity to amino
CC      acid consensus sequences of RBPs, and to RNAs. AAH24815-16 were used to
CC      produce a double-stranded RNA1, comprising the Y-1 domain of human
CC      telomerase
XX
SQ      Sequence 66 BP; 10 A; 11 C; 28 G; 17 T; 0 U; 0 Other;

      Query Match      12.0%; Score 54; DB 1; Length 66;
      Best Local Similarity 100.0%; Pred. No. 0.77;
      Matches 54; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 GGGTTGCGGAGGTGGGCTGGGAGGGTGGTGCCATTTTGTCTAACCCCTA 54
      |||
      6 GGGTTGCGGAGGTGGGCTGGGAGGGTGGTGCCATTTTGTCTAACCCCTA 59

RESULT 6
AAZ00334
ID      AAZ00334 standard; DNA; 51 BP.
XX
AC      AAZ00334;
XX
DT      22-OCT-1999 (first entry)
XX
DE      Mutated hTR promoter fragment containing construct 29111 (mRCE).
```

XX Telomerase RNA; TR; promoter; cytotoxin; cancer; neoplasia; hTR;  
 KW gene therapy; thymidine kinase gene; anticancer therapy; human; ss.  
 OS Homo sapiens.  
 OS Synthetic.  
 XX WO9938964-A2.  
 PN 05-AUG-1999.  
 PD 29-JAN-1999; 99WO-GB0000308.  
 PF 29-JAN-1998; 98GB-00001902.  
 PR (CANC-) CANCER RES CAMPAIGN TECHNOLOGY.  
 XX Keith WN;  
 PI WPI; 1999-479183/40.  
 DR Mouse and human telomerase RNA gene promoters, useful for tumor specific  
 XX gene therapy.  
 XX Disclosure; Fig 19; 109pp; English.  
 XX The invention relates to promoter regions from mouse and human telomerase  
 CC RNA (TR) component genes. The TR gene promoter can be linked to a  
 CC heterologous gene, especially a gene encoding a cytotoxin, for therapy of  
 CC cancer, especially neoplasias. The telomerase is necessary for the  
 CC unrestricted proliferative capacity of many human cancers. Mutation or  
 CC dysregulation of the telomerase repression pathway may cause reactivation  
 CC or upregulation of telomerase expression in cancer. Substances,  
 CC identified in the methods, can be used to block transcription from the TR  
 CC gene promoter through interaction of the 5' regulatory sequences. These  
 CC substances, e.g. antisense oligonucleotides, transcription factors,  
 CC peptide nucleic acids and factors that disrupt signal transduction, are  
 CC useful for cancer therapy. In particular, gene therapy vectors  
 CC (especially pGT62-codAupp) comprising the promoter and a viral thymidine  
 CC kinase gene can be used to convert a prodrug, e.g. gancyclovir, so that  
 CC neoplasia can be controlled or treated. Direct down-regulation of  
 CC telomerase RNA gene through manipulation of transcription factors may be  
 CC effective anticancer therapy and the cloning of the hTR gene promoter  
 CC allows the analysis of therapeutic molecules which modulate hTR promoter  
 CC activity. Sequences AA207324-332 and AA200332-340 represent constructs  
 CC with hTR promoter sequence element mutations  
 XX Sequence 51 BP; 8 A; 8 C; 21 G; 14 T; 0 U; 0 Other;  
 SQ Query Match 10.2%; Score 46.2; DB 1; Length 51;  
 Best Local Similarity 94.1%; Pred. No. 2.6;  
 Matches 48; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 QY 1 GGCTTCCGAGGGTGGGCTGGAGGGTGGTGGCCATTTTGTCTAACC 51  
 DB 1 GGGTTCCGGAATGGGCTGGAGGGTGGTGGCCATTTTGTCTAACC 51  
 RESULT 7  
 ID AA200335 standard; DNA; 51 BP.  
 XX AA200335;  
 XX 22-OCT-1999 (first entry)  
 DE Mutated hTR promoter fragment containing construct 29112 (mSp1.4).  
 XX Telomerase RNA; TR; promoter; cytotoxin; cancer; neoplasia; hTR;  
 KW gene therapy; thymidine kinase gene; anticancer therapy; human; ss.  
 XX Homo sapiens.  
 OS Synthetic.

XX WO9938964-A2.  
 PN 05-AUG-1999.  
 PD 29-JAN-1999; 99WO-GB0000308.  
 PF 29-JAN-1998; 98GB-00001902.  
 PR (CANC-) CANCER RES CAMPAIGN TECHNOLOGY.  
 XX Keith WN;  
 PI WPI; 1999-479183/40.  
 DR Mouse and human telomerase RNA gene promoters, useful for tumor specific  
 XX gene therapy.  
 XX Disclosure; Fig 19; 109pp; English.  
 XX The invention relates to promoter regions from mouse and human telomerase  
 CC RNA (TR) component genes. The TR gene promoter can be linked to a  
 CC heterologous gene, especially a gene encoding a cytotoxin, for therapy of  
 CC cancer, especially neoplasias. The telomerase is necessary for the  
 CC unrestricted proliferative capacity of many human cancers. Mutation or  
 CC dysregulation of the telomerase repression pathway may cause reactivation  
 CC or upregulation of telomerase expression in cancer. Substances,  
 CC identified in the methods, can be used to block transcription from the TR  
 CC gene promoter through interaction of the 5' regulatory sequences. These  
 CC substances, e.g. antisense oligonucleotides, transcription factors,  
 CC peptide nucleic acids and factors that disrupt signal transduction, are  
 CC useful for cancer therapy. In particular, gene therapy vectors  
 CC (especially pGT62-codAupp) comprising the promoter and a viral thymidine  
 CC kinase gene can be used to convert a prodrug, e.g. gancyclovir, so that  
 CC neoplasia can be controlled or treated. Direct down-regulation of  
 CC telomerase RNA gene through manipulation of transcription factors may be  
 CC effective anticancer therapy and the cloning of the hTR gene promoter  
 CC allows the analysis of therapeutic molecules which modulate hTR promoter  
 CC activity. Sequences AA207324-332 and AA200332-340 represent constructs  
 CC with hTR promoter sequence element mutations  
 XX Sequence 51 BP; 6 A; 8 C; 22 G; 15 T; 0 U; 0 Other;  
 SQ Query Match 10.2%; Score 46.2; DB 1; Length 51;  
 Best Local Similarity 94.1%; Pred. No. 2.6;  
 Matches 48; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 QY 1 GGCTTCCGAGGGTGGGCTGGAGGGTGGTGGCCATTTTGTCTAACC 51  
 DB 1 GGGTTCCGAGGGTGGGCTGGAGGGTGGTGGCCATTTTGTCTAACC 51  
 RESULT 8  
 ID AA200337 standard; DNA; 47 BP.  
 XX AA200337;  
 XX 22-OCT-1999 (first entry)  
 DE Mutated hTR promoter fragment containing construct 112(RCE).  
 XX Telomerase RNA; TR; promoter; cytotoxin; cancer; neoplasia; hTR;  
 KW gene therapy; thymidine kinase gene; anticancer therapy; human; ss.  
 XX Homo sapiens.  
 OS Synthetic.  
 XX WO9938964-A2.  
 PN 05-AUG-1999.  
 PD 29-JAN-1999; 99WO-GB0000308.  
 PF 29-JAN-1998; 98GB-00001902.

```
XX PR 29-JAN-1998; 98GB-00001902.
XX PA (CANC-) CANCER RES CAMPAIGN TECHNOLOGY.
XX PI Keith WN;
XX XX
XX DR WPI; 1999-479183/40.
XX XX
XX CC The invention relates to promoter regions from mouse and human telomerase
XX CC RNA (TR) component genes. The TR gene promoter can be linked to a
XX CC heterologous gene, especially a gene encoding a cytotoxin, for therapy of
XX CC cancer, especially neoplasias. The telomerase is necessary for the
XX CC unrestricted proliferative capacity of many human cancers. Mutation or
XX CC dysregulation of the telomerase repression pathway may cause reactivation
XX CC or upregulation of telomerase expression in cancer. Substances,
XX CC identified in the methods, can be used to block transcription from the TR
XX CC gene promoter through interaction of the 5' regulatory sequences. These
XX CC substances, e.g. antisense oligonucleotides, transcription factors,
XX CC peptide nucleic acids and factors that disrupt signal transduction, are
XX CC useful for cancer therapy. In particular, gene therapy vectors
XX CC (especially pGT62-codAupp) comprising the promoter and a viral thymidine
XX CC kinase gene can be used to convert a prodrug, e.g. gancyclovir, so that
XX CC neoplasia can be controlled or treated. Direct down-regulation of
XX CC telomerase RNA gene through manipulation of transcription factors may be
XX CC effective anticancer therapy and the cloning of the hTR gene promoter
XX CC allows the analysis of therapeutic molecules which modulate hTR promoter
XX CC activity. Sequences AAZ07324-332 and AAZ00332-340 represent constructs
XX CC with hTR promoter sequence element mutations
XX SQ Sequence 47 BP; 6 A; 7 C; 20 G; 14 T; 0 U; 0 Other;
Query Match 8.8%; Score 39.6; DB 1; Length 47;
Best Local Similarity 91.3%; Pred. No. 8.9;
Matches 42; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 6 GCGGAGGGTGGCGCTGGAGGGGTGGTGGCCATTTTGTCTAACC 51
Db | | | | | | | | | | | | | | | | | | | | | |
2 GTGGAGGGTGGCGCTGGGTAAAGTGGTGGCCATTTTGTCTAACC 47
RESULT 9
AAZ00336
XX AC AAZ00336 standard; DNA; 47 BP.
XX XX
XX DT 22-OCT-1999 (first entry)
XX XX
XX DE Mutated hTR promoter fragment containing construct 111 (mSp1.4).
XX XX
XX KW Telomerase RNA; TR; promoter; cytotoxin; cancer; neoplasia; hTR;
XX KW gene therapy; thymidine kinase gene; anticancer therapy; human; ss.
XX XX
XX OS Homo sapiens.
XX OS Synthetic.
XX XX
XX PN WO9938964-A2.
XX XX
XX PD 05-AUG-1999.
XX XX
XX PF 29-JAN-1999; 99WO-GB0000308.
XX XX
XX PR 29-JAN-1998; 98GB-00001902.
XX XX
XX PA (CANC-) CANCER RES CAMPAIGN TECHNOLOGY.
XX PI Keith WN;
XX XX
```

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```
XX DR WPI; 1999-479183/40.
XX XX
XX PT Mouse and human telomerase RNA gene promoters, useful for tumor specific
XX PT gene therapy.
XX XX
XX PS Disclosure; Fig 19; 109pp; English.
XX XX
XX CC The invention relates to promoter regions from mouse and human telomerase
XX CC RNA (TR) component genes. The TR gene promoter can be linked to a
XX CC heterologous gene, especially a gene encoding a cytotoxin, for therapy of
XX CC cancer, especially neoplasias. The telomerase is necessary for the
XX CC unrestricted proliferative capacity of many human cancers. Mutation or
XX CC dysregulation of the telomerase repression pathway may cause reactivation
XX CC or upregulation of telomerase expression in cancer. Substances,
XX CC identified in the methods, can be used to block transcription from the TR
XX CC gene promoter through interaction of the 5' regulatory sequences. These
XX CC substances, e.g. antisense oligonucleotides, transcription factors,
XX CC peptide nucleic acids and factors that disrupt signal transduction, are
XX CC useful for cancer therapy. In particular, gene therapy vectors
XX CC (especially pGT62-codAupp) comprising the promoter and a viral thymidine
XX CC kinase gene can be used to convert a prodrug, e.g. gancyclovir, so that
XX CC neoplasia can be controlled or treated. Direct down-regulation of
XX CC telomerase RNA gene through manipulation of transcription factors may be
XX CC effective anticancer therapy and the cloning of the hTR gene promoter
XX CC allows the analysis of therapeutic molecules which modulate hTR promoter
XX CC activity. Sequences AAZ07324-332 and AAZ00332-340 represent constructs
XX CC with hTR promoter sequence element mutations
XX SQ Sequence 47 BP; 8 A; 7 C; 19 G; 13 T; 0 U; 0 Other;
Query Match 8.8%; Score 39.6; DB 1; Length 47;
Best Local Similarity 91.3%; Pred. No. 8.9;
Matches 42; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 6 GCGGAGGGTGGCGCTGGAGGGGTGGTGGCCATTTTGTCTAACC 51
Db | | | | | | | | | | | | | | | | | | | | | |
2 GTGGAATGGCGCTGGAGGGGTGGTGGCCATTTTGTCTAACC 47
RESULT 10
AAZ00339
XX ID AAZ00339 standard; DNA; 47 BP.
XX XX
XX AC AAZ00339;
XX XX
XX DT 22-OCT-1999 (first entry)
XX XX
XX DE Mutated hTR promoter fragment containing construct 115.
XX XX
XX KW Telomerase RNA; TR; promoter; cytotoxin; cancer; neoplasia; hTR;
XX KW gene therapy; thymidine kinase gene; anticancer therapy; human; ss.
XX XX
XX OS Homo sapiens.
XX OS Synthetic.
XX XX
XX PN WO9938964-A2.
XX XX
XX PD 05-AUG-1999.
XX XX
XX PF 29-JAN-1999; 99WO-GB0000308.
XX XX
XX PR 29-JAN-1998; 98GB-00001902.
XX XX
XX PA (CANC-) CANCER RES CAMPAIGN TECHNOLOGY.
XX PI Keith WN;
XX XX
XX DR WPI; 1999-479183/40.
XX XX
XX PT Mouse and human telomerase RNA gene promoters, useful for tumor specific
XX PT gene therapy.
```





CC gene promoter through interaction of the 5' regulatory sequences. These  
 CC substances, e.g. antisense oligonucleotides, transcription factors,  
 CC peptide nucleic acids and factors that disrupt signal transduction, are  
 CC useful for cancer therapy. In particular, gene therapy vectors  
 CC (especially pGT62-codAupp) comprising the promoter and a viral thymidine  
 CC kinase gene can be controlled or treated. Direct down-regulation of  
 CC neoplasia can be controlled or treated. e.g. gancyclovir, so that  
 CC telomerase RNA gene through manipulation of transcription factors may be  
 CC effective anticancer therapy and the cloning of the hTR gene promoter  
 CC allows the analysis of therapeutic molecules which modulate hTR promoter  
 CC activity. Sequences AA207696-321 represent PCR primers used in cloning  
 CC and mutagenesis of human TR gene (hTR) promoter region  
 XX  
 SQ Sequence 38 BP; 3 A; 7 C; 21 G; 7 T; 0 U; 0 Other;  
 Query Match 6.9%; Score 31.2; DB 1; Length 38;  
 Best Local Similarity 91.7%; Pred. No. 36;  
 Matches 33; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 Qy 1 GGGTTGGAGGGTGGGCTGGAGGGGTGGTGGCC 36  
 |||||  
 Db 3 GGGTTGGAGGGTGGGCTGGGTAAGGTGGTGGCC 38  
 |||||  
 RESULT 13  
 ID AA207297 standard; DNA; 38 BP.  
 AC AA207297;  
 XX  
 XX 22-OCT-1999 (first entry)  
 DT  
 XX Human telomerase RNA gene (hTR) promoter specific primer h111.  
 DE  
 XX Telomerase RNA; TR; promoter; cytotoxin; cancer; neoplasia; hTR;  
 KW gene therapy; thymidine kinase gene; anticancer therapy; human;  
 KW mutagenesis; PCR primer; ss.  
 XX  
 OS Synthetic.  
 OS Homo sapiens.  
 OS  
 PN WO9938964-A2.  
 XX  
 XX 05-AUG-1999.  
 PD  
 XX 29-JAN-1999; 99WO-GB000308.  
 XX  
 XX 29-JAN-1998; 98GB-00001902.  
 XX  
 XX (CANC-) CANCER RES CAMPAIGN TECHNOLOGY.  
 XX  
 XX Keith WN;  
 PI  
 XX WPI; 1999-479183/40.  
 DR  
 XX Mouse and human telomerase RNA gene promoters, useful for tumor specific  
 PT gene therapy.  
 PT  
 XX Disclosure; Fig 12; 109pp; English.  
 XX  
 XX The invention relates to promoter regions from mouse and human telomerase  
 CC RNA (TR) component genes. The TR gene promoter can be linked to a  
 CC heterologous gene, especially a gene encoding a cytotoxin, for therapy of  
 CC cancer, especially neoplasias. The telomerase is necessary for the  
 CC unrestricted proliferative capacity of many human cancers. Mutation or  
 CC dysregulation of the telomerase repression pathway may cause reactivation  
 CC or upregulation of telomerase expression in cancer. Substances,  
 CC identified in the methods, can be used to block transcription from the TR  
 CC gene promoter through interaction of the 5' regulatory sequences. These  
 CC substances, e.g. antisense oligonucleotides, transcription factors,  
 CC peptide nucleic acids and factors that disrupt signal transduction, are  
 CC useful for cancer therapy. In particular, gene therapy vectors  
 CC (especially pGT62-codAupp) comprising the promoter and a viral thymidine

CC kinase gene can be used to convert a prodrug, e.g. gancyclovir, so that  
 CC neoplasia can be controlled or treated. Direct down-regulation of  
 CC telomerase RNA gene through manipulation of transcription factors may be  
 CC effective anticancer therapy and the cloning of the hTR gene promoter  
 CC allows the analysis of therapeutic molecules which modulate hTR promoter  
 CC activity. Sequences AA207696-321 represent PCR primers used in cloning  
 CC and mutagenesis of human TR gene (hTR) promoter region  
 XX  
 SQ Sequence 38 BP; 5 A; 7 C; 20 G; 6 T; 0 U; 0 Other;  
 Query Match 6.9%; Score 31.2; DB 1; Length 38;  
 Best Local Similarity 91.7%; Pred. No. 36;  
 Matches 33; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 Qy 1 GGGTTGGAGGGTGGGCTGGAGGGGTGGTGGCC 36  
 |||||  
 Db 3 GGGTTGGAGAAATGGGCTGGAGGGGTGGTGGCC 38  
 |||||  
 RESULT 14  
 ID AAV63645/c  
 XX AAV63645 standard; DNA; 31 BP.  
 AC AAV63645;  
 XX  
 XX 15-FEB-1999 (first entry)  
 DT  
 XX Antisense oligonucleotide anti-P for human telomerase RNA component.  
 DE  
 XX Human; telomerase RNA component; anticancer therapy; purification; assay;  
 KW vaccine; cancer; antisense oligonucleotide; ss.  
 KW  
 XX Synthetic.  
 OS Homo sapiens.  
 OS  
 XX  
 FH Key Location/Qualifiers  
 FT modified\_base 1  
 FT /tag= a  
 FT /note= "biotinylated"  
 FT modified\_base 31  
 FT /tag= b  
 FT /note= "biotinylated"  
 FT  
 XX WO9845450-A1.  
 PN  
 XX 15-OCT-1998.  
 PD  
 XX 04-APR-1997; 97WO-US006012.  
 XX  
 XX 04-APR-1997; 97WO-US006012.  
 PR  
 XX (GERO-) GERON CORP.  
 PA  
 XX  
 PI Weinrich SL, Atkinson EM, Lichtsteiner SP, Vasserot AP, Pruzan RA;  
 PI Kealey JT;  
 XX  
 XX WPI; 1998-594485/50.  
 DR  
 XX Purification of telomerase on affinity material - useful for, e.g.  
 PT diagnosis and treatment of cancer.  
 PT  
 XX Disclosure; Page 24; 76pp; English.  
 PS  
 XX The present sequence represents an antisense oligonucleotide directed  
 CC against the human telomerase RNA component gene sequences. The  
 CC oligonucleotide can be used as an affinity agent in the methods of the  
 CC invention, which are used to purify human telomerase. The methods involve  
 CC the use of several sequential steps, including the use of two matrices  
 CC that bind molecules bearing negative charges, a matrix that binds  
 CC molecules bearing positive charges, an affinity purification step and a  
 CC size separation. Telomerase is a particular target of anticancer  
 CC therapies, and is useful in assays for characterizing (pre)cancerous  
 CC cells. Telomerase can also be used to screen for specific modulators, for



mammalian telomerase and as inhibitors of telomerase activity, or to detect and/or quantitate polynucleotide having the human telomerase RNA component (HTR) sequence, as well as in forensic identification of individuals, such as paternity testing or identification of criminal suspects or unknown descendants based on the HTR gene RFLP pattern. The RNA can be further used for treating or preventing cancer, inflammation, lymphoproliferative diseases, autoimmune disease, or neurodegenerative diseases. The PNAs in combination with other pharmaceuticals (such as antineoplastic or cytostatic agents) can be used for treating neoplasia, hyperplasia, human immunodeficiency virus (HIV) infections, acquired immunodeficiency syndrome (AIDS) and associated pathologies, and other diseases characterised by abnormal telomere metabolism or telomerase activity. The present sequence representing HTR RNA strand #2 is used to test the inhibition of telomerase activity by the PNAs of the present invention.

X	Sequence	31 BP;	8 A;	6 C;	8 G;	0 T;	9 U;	0 Other;
Query Match	6.9%;	Score 31;	DB 1;	Length 31;				
Best Local Similarity	71.0%;	Prod. NO. 28;						
Matches 22:	Conservative	9:	Mismatches	0:	Indels	0:	Gaps	0:

[illegible]

RESULT 17	
AA509472/c	
ID	AA509472 standard; DNA; 31 BP.
XX	
XX	
AC	AA509472;
XX	
XX	
DT	24-OCT-2001 (first entry)
XX	
DE	Antisense oligonucleotide for human telomerase, anti-P.
XX	
XX	
KW	Human; Telomerase; vaccine; antibody; cancer; EF2H; nucleolin;
KW	antisense oligonucleotide; anti-P; ss.

XX	US6261556-B1.
PN	
XX	
XX	
PD	17-JUL-2001.
XX	
XX	
Pf	18-OCT-1999; 99US-00420056.
XX	
XX	
PR	04-AUG-1995; 95US-00510736.
PR	04-APR-1997; 97US-00833377.
XX	
XX	(GERO-) GERON CORP.
PA	
XX	
XX	Weinrich SL, Atkinson EM, Lichtsteiner SP, Vasserot AP, Pruzan RA;
Fi	Kealey JT;
Pt	
DR	WPI: 2001-450477/48.
XX	
DD	

XX The sequence represents a biotinylated antisense oligonucleotide used in  
CC the purification of human telomerase. The invention relates to a purified  
CC human telomerase core enzyme protein comprising 2000-fold increased  
CC

CC purity compared with a crude extract of cells from adenovirus-transformed  
CC kidney cell line (293 cells) and when associated with telomerase RNA  
CC component has DNA polymerase activity and a molecular weight of 200-2000  
CC kilo Daltons (kDa). The purified telomerase is useful for inducing a  
CC humoral or cell-mediated immune response in an animal. Purified  
CC telomerase or immunogenic fragments are useful as vaccines for treating  
CC diseases associated with over-expression of telomerase, such as cancer  
CC and for producing antibodies that recognize telomerase, which are useful  
CC as affinity agents in isolating the proteins and for detecting the  
CC presence of proteins in a sample, such as cell or tissue. Identification  
CC of telomerase aids in diagnosis of cancer or pre-cancerous states.  
CC Telomerase and/or telomerase associated proteins are also useful for  
CC screening compounds to identify agents that alter the association of  
CC telomerase-associated proteins, such as nucleolin or EP2H with telomerase  
XX  
XX Sequence 31. BP: 7 A 9 C: 7 G: 8 T: 0 U: 0 Other:

Query Match 6.9%; Score 31; DB 1; Length 31;  
Best Local Similarity 100.0%; Pred. No. 28;  
Matches 31; Conservative 0; Mismatches 0; Indels

QY 42 TTGTCTAACCCCTAACTGAGAAGGGCGTAGGC 72  
|||  
db 31 TTGTCTAACCCCTAACTGAGAAGGGCGTAGGC 1

RESULT 18	
ABX10982/C	
ID	ABX10982 standard; DNA; 31 BP.
XX	
AC	ABX10982;
XX	
DT	17-AUG-2003 (first entry)
XX	
DE	Human telomerase antisense oligonucleotide primer Antip.
XX	
KW	Telomerase: antisense: primer; Antip; ss: cancer.

FT	modified_base	31	/*tag=	b
FT			/note=	"Biotinylated"

[illegible]

This invention relates to a purified human telomerase protein, which when associated with telomerase RNA component has DNA polymerase activity. Also disclosed in the specification is a method for assessing a regulator (preferably a telomerase inhibitor or activator of telomerase involves

CC measuring telomerase enzymatic activity of the composition in presence of  
 CC a regulator. The telomerase protein of the invention may be used in  
 CC developing and testing assays for measuring telomerase activity which are  
 CC useful in characterising cancer and pre-cancer cells, for identifying and  
 CC testing regulators of telomerase activity in in vitro assay and for  
 CC preparing antibodies against telomerase. The mammalian telomerase protein  
 CC of the invention is at least approximately 3000 fold more pure (in terms  
 CC of telomerase activity per weight of protein) than a crude extract of  
 CC cell from adenovirus- transformed kidney cell. Purified telomerase  
 CC facilitates a thorough biochemical analysis of the enzyme's mechanism for  
 CC developing mechanism- based regulators. The present sequence represents a  
 CC human telomerase antisense oligonucleotide which has affinity to  
 CC telomerase and is used to purify the telomerase protein of the invention  
 CC XX

SQ Sequence 31 BP; 7 A; 9 C; 7 G; 8 T; 0 U; 0 Other;  
 Query Match 6.9%; Score 31; DB 1; Length 31;  
 Best Local Similarity 100.0%; Pred. No. 28;  
 Matches 31; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 42 TTGTCTAACCTTAAGGCGGTAGGC 72  
 |||||  
 DB 31 TTGTCTAACCTTAAGGCGGTAGGC 1  
 |||||

RESULT 19  
 ADC35648/c  
 ID ADC35648 standard; DNA; 31 BP.  
 XX  
 AC ADC35648;  
 XX  
 DT 18-DEC-2003 (first entry)  
 XX  
 DE Human telomerase RNA component antisense oligonucleotide seq id 1.  
 XX  
 KW mammalian telomerase protein; telomerase purification; telomere;  
 KW anion exchange matrix; cation exchange matrix; selectivity matrix;  
 KW gel filtration chromatography; gradient centrifugation;  
 KW antisense oligonucleotide; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN US6545133-B1.  
 XX  
 PD 08-APR-2003.  
 XX  
 PF 20-NOV-2000; 2000US-00717829.  
 XX  
 PR 04-AUG-1995; 95US-00510736.  
 PR 04-APR-1997; 97US-00833377.  
 PR 18-OCT-1999; 99US-00420056.  
 XX  
 PA (GERO-) GERON CORP.  
 XX  
 PI Weinrich SL, Atkinson EM, Lichtsteiner SP, Vasserot AP, Pruzan RA;  
 XX  
 DR WPI; 2003-742824/70.  
 XX  
 PT Obtaining telomerase, by preparing enriched solution from cell expressing  
 PT telomerase, combining the solution with oligonucleotide having specific  
 PT affinity for the protein and collecting protein bound to oligonucleotide.  
 XX  
 PS Disclosure; SEQ ID NO 1; 24pp; English.  
 XX  
 CC The invention describes a method of obtaining mammalian telomerase  
 CC protein (I). The method involves preparing enriched solution (ES) from a  
 CC cell expressing telomerase where the component of (I) in ES is separated  
 CC from other proteins expressed by cell by combining ES with  
 CC oligonucleotide (O) having specific affinity for (I), and collecting  
 CC protein bound to (O). The oligonucleotide comprises a retrievable label  
 CC such as biotin and contains a sequence that is specifically recognized by  
 CC telomerase protein. The oligonucleotide contains or does not contain the  
 CC sequence (TTAGGG)3. The method further comprises combining a fraction

CC containing telomerase protein with an anion exchange matrix, and  
 CC collecting protein that binds the matrix, combining a fraction containing  
 CC telomerase protein with a cation exchange matrix (such as a heparin  
 CC matrix), and collecting protein that binds the matrix. The method  
 CC comprises successively enriching fractions containing telomerase protein  
 CC on several different ion exchange matrices and combining a fraction  
 CC containing telomerase protein with an intermediate selectivity matrix,  
 CC collecting protein that binds the matrix, where the intermediate  
 CC selectivity matrix and separating a fraction containing the telomerase  
 CC protein by gel filtration chromatography or gradient centrifugation. The  
 CC telomerase is enriched from an extract of cells stably expressing  
 CC telomerase. This sequence represents an antisense oligonucleotide to the  
 CC RNA component of human telomerase that can be used in the purification  
 CC method of the invention.  
 CC XX

SQ Sequence 31 BP; 7 A; 9 C; 7 G; 8 T; 0 U; 0 Other;  
 Query Match 6.9%; Score 31; DB 1; Length 31;  
 Best Local Similarity 100.0%; Pred. No. 28;  
 Matches 31; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 42 TTGTCTAACCTTAAGGCGGTAGGC 72  
 |||||  
 DB 31 TTGTCTAACCTTAAGGCGGTAGGC 1  
 |||||

RESULT 20  
 ADG62870/c  
 ID ADG62870 standard; DNA; 31 BP.  
 XX  
 AC ADG62870;  
 XX  
 DT 11-MAR-2004 (first entry)  
 XX  
 DE Human telomerase RNA antisense oligonucleotide, anti-P.  
 XX  
 KW Telomerase activity; therapy; cancer; cytostatic; antisense; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PH Key Location/Qualifiers  
 FT modified\_base 1 /tag= a  
 FT /mod\_base= OTHER  
 FT /note= "Biotin labelled"  
 FT modified\_base 31 /tag= b  
 FT /mod\_base= OTHER  
 FT /note= "Biotin labelled"  
 XX  
 PN US2003186282-A1.  
 XX  
 PD 02-OCT-2003.  
 XX  
 PF 24-DEC-2002; 2002US-00330872.  
 XX  
 PR 04-AUG-1995; 95US-00510736.  
 PR 04-APR-1997; 97US-00833377.  
 PR 18-OCT-1999; 99US-00420056.  
 PR 20-NOV-2000; 2000US-00717828.  
 XX  
 PA (WEIN/) WEINRICH S L.  
 PA (ATKI/) ATKINSON E M.  
 PA (LICH/) LICHTSTEINER S P.  
 PA (VASS/) VASSEROT A P.  
 PA (PRUZ/) PRUZAN R A.  
 XX  
 PI Weinrich SL, Atkinson EM, Lichtsteiner SP, Vasserot AP, Pruzan RA;  
 XX  
 DR WPI; 2003-811733/76.  
 XX  
 PT Identifying telomerase regulators useful for treating cancer.  
 XX



Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 77 TGCCTTTGCTCCCGCGCTGTTTTC 106  
 |||||  
 Db 30 TGCCTTTGCTCCCGCGCTGTTTTC 1

RESULT 23  
 AAV63648/c  
 ID AAV63648 standard; DNA; 30 BP.

XX AC AAV63648;  
 XX DT 15-FEB-1999 (first entry)  
 XX DE Antisense oligonucleotide 13 for human telomerase RNA component.  
 XX KW Human; telomerase RNA component; anticancer therapy; purification; assay;  
 XX KW vaccine; cancer; antisense oligonucleotide; ss.  
 XX OS Synthetic.  
 XX OS Homo sapiens.  
 XX PH Key Location/Qualifiers  
 FT modified\_base 1 /\*tag= a  
 FT /note= "biotinylated"  
 XX PN WO9845450-A1.  
 XX PD 15-OCT-1998.  
 XX PF 04-APR-1997; 97WO-US006012.  
 XX PR 04-APR-1997; 97WO-US006012.  
 XX PA (GERO-) GERON CORP.  
 XX PI Weinrich SL, Atkinson EM, Lichtsteiner SP, Vasserot AP, Pruzan RA;  
 XX PI Kealey JT;  
 XX DR WPI; 1998-594485/50.  
 XX PT Purification of telomerase on affinity material - useful for, e.g.  
 XX PT diagnosis and treatment of cancer.  
 XX PS Disclosure; Page 24; 76pp; English.  
 XX CC The present sequence represents an antisense oligonucleotide directed  
 CC against the human telomerase RNA component gene sequences. The  
 CC oligonucleotide can be used as an affinity agent in the methods of the  
 CC invention, which are used to purify human telomerase. The methods involve  
 CC the use of several sequential steps, including the use of two matrices  
 CC that bind molecules bearing negative charges, a matrix that binds  
 CC molecules bearing positive charges, an affinity purification step and a  
 CC size separation. Telomerase is a particular target of anticancer  
 CC therapies, and is useful in assays for characterizing (pre)cancerous  
 CC cells. Telomerase can also be used to screen for specific modulators, for  
 CC biochemical analysis of its activity, and in preparation of antibodies.  
 CC Fragments of telomerase, or nucleic acid encoding them, are used in  
 CC vaccines, and for treating over expression of telomerase, particularly in  
 CC cancer

SQ Sequence 30 BP; 6 A; 6 C; 8 G; 10 T; 0 U; 0 Other;

Query Match 6.7%; Score 30; DB 1; Length 30;  
 Best Local Similarity 100.0%; Pred. No. 32;  
 Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 167 AAACAAAATGTCAGCTGCGCCGTC 196  
 |||||  
 Db 30 AAACAAAATGTCAGCTGCGCCGTC 1

RESULT 24  
 AAV63649/c  
 ID AAV63649 standard; DNA; 30 BP.

XX AC AAV63649;  
 XX DT 15-FEB-1999 (first entry)  
 XX DE Antisense oligonucleotide 14 for human telomerase RNA component.  
 XX KW Human; telomerase RNA component; anticancer therapy; purification; assay;  
 XX KW vaccine; cancer; antisense oligonucleotide; ss.  
 XX OS Synthetic.  
 XX OS Homo sapiens.  
 XX PH Key Location/Qualifiers  
 FT modified\_base 1 /\*tag= a  
 FT /note= "biotinylated"  
 XX PN WO9845450-A1.  
 XX PD 15-OCT-1998.  
 XX PF 04-APR-1997; 97WO-US006012.  
 XX PR 04-APR-1997; 97WO-US006012.  
 XX PA (GERO-) GERON CORP.  
 XX PI Weinrich SL, Atkinson EM, Lichtsteiner SP, Vasserot AP, Pruzan RA;  
 XX PI Kealey JT;  
 XX DR WPI; 1998-594485/50.  
 XX PT Purification of telomerase on affinity material - useful for, e.g.  
 XX PT diagnosis and treatment of cancer.  
 XX PS Disclosure; Page 24; 76pp; English.  
 XX CC The present sequence represents an antisense oligonucleotide directed  
 CC against the human telomerase RNA component gene sequences. The  
 CC oligonucleotide can be used as an affinity agent in the methods of the  
 CC invention, which are used to purify human telomerase. The methods involve  
 CC the use of several sequential steps, including the use of two matrices  
 CC that bind molecules bearing negative charges, a matrix that binds  
 CC molecules bearing positive charges, an affinity purification step and a  
 CC size separation. Telomerase is a particular target of anticancer  
 CC therapies, and is useful in assays for characterizing (pre)cancerous  
 CC cells. Telomerase can also be used to screen for specific modulators, for  
 CC biochemical analysis of its activity, and in preparation of antibodies.  
 CC Fragments of telomerase, or nucleic acid encoding them, are used in  
 CC vaccines, and for treating over expression of telomerase, particularly in  
 CC cancer

SQ Sequence 30 BP; 8 A; 5 C; 13 G; 4 T; 0 U; 0 Other;

Query Match 6.7%; Score 30; DB 1; Length 30;  
 Best Local Similarity 100.0%; Pred. No. 32;  
 Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 137 CCTGCCGCTTCCACCGTTCATTCTAGAGC 166  
 |||||  
 Db 30 CCTGCCGCTTCCACCGTTCATTCTAGAGC 1

RESULT 25  
 AAV41175/c  
 ID AAV41175 standard; DNA; 30 BP.

XX AC AAV41175;

XX DT 08-OCT-1998 (first entry)

XX DE RNA component of human telomerase (hTR) antisense oligo 21.

XX DE

XX KW RNA component; human telomerase; antisense oligonucleotide; infection; neuroblastoma; bladder cancer; colon cancer; prostate cancer; cancer; KW KW contraception; sterilisation; immunosuppression; therapeutic; hTR; KW KW immune system down-regulation; anti-inflammatory therapy; ss.

XX OS Synthetic.

OS OS Homo sapiens.

XX XX WO9828442-A1.

XX PN

XX PD 02-JUL-1998.

XX XX

XX PF 19-DEC-1997; 97WO-US023619.

XX XX

XX PR 20-DEC-1996; 96US-00770564.

PR PR 20-DEC-1996; 96US-00770565.

XX XX

XX PA (GERO-) GERON CORP.

XX PA

XX PI Kim NW, Wu F, Kealey JT, Pruzan R, Weinrich SL;

XX PI

XX XX WPI; 1998-377670/32.

DR DR

XX XX

XX PT New polynucleotide(s) anti-sense to human telomerase - used for detecting or inhibiting human telomerase, e.g. for treating cancers, contraception, PT PT immuno-suppression or treating infection.

PT PT

XX XX

XX PS Claim 11; Page 65; 80pp; English.

XX XX

CC Sequences shown in AAV41169 to AAV41181 represent antisense CC CC oligonucleotides to the RNA component of human telomerase (hTR). These CC CC antisense oligonucleotides specifically hybridise to a nucleotide CC CC sequence within an accessible region of the hTR, but that does not CC CC hybridise to a sequence within the template region of hTR. These CC CC oligonucleotides may specifically be used for detection of an RNA CC CC component of human telomerase in a sample. This is useful for diagnosing CC CC cancer (especially neuroblastoma, bladder, colon and prostate cancer), CC CC and providing prognosis for a cancer patient. The inhibitory CC CC oligonucleotides can inhibit the telomerase activity level in a cell by CC CC interfering with transcription of the RNA component, decreasing the half- CC CC life of the telomerase RNA component transcript, inhibiting assembly of CC CC the RNA component into the telomerase holoenzyme, or inhibiting the CC CC polymerase activity of telomerase. These antisense oligonucleotides can CC CC be used for inhibiting telomerase activity in both cultured cells and in CC CC cells in vivo. They can be used in therapeutics for treating or CC CC preventing cancer, for contraception or sterilisation, for CC CC immunosuppression, and for selectively down-regulating specific branches CC CC of the immune system, e.g. a specific subset of T-cells, in anti- CC CC inflammatory therapies or for treating infections by, e.g. yeast, CC CC parasites or fungi

XX XX

XX SQ Sequence 30 BP; 8 A; 5 C; 13 G; 4 T; 0 U; 0 Other;

Query Match 6.7%; Score 30; DB 1; Length 30;

Best Local Similarity 100.0%; Pred. No. 32;

Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 137 CCTGCGCGCTCCACCGTTTCATTCTAGAGC 166

Db 30 CCTGCGCGCTCCACCGTTTCATTCTAGAGC 1

RESULT 26

AAV41172/c

ID AAV41172 standard; DNA; 30 BP.

XX XX

XX AC AAV41172;

XX XX

DT 08-OCT-1998 (first entry)

XX XX

DE RNA component of human telomerase (hTR) antisense oligo 16.

XX XX

XX KW RNA component; human telomerase; antisense oligonucleotide; infection; neuroblastoma; bladder cancer; colon cancer; prostate cancer; cancer; KW KW contraception; sterilisation; immunosuppression; therapeutic; hTR; KW KW immune system down-regulation; anti-inflammatory therapy; ss.

XX OS Synthetic.

OS OS Homo sapiens.

XX XX WO9828442-A1.

XX PN

XX PD 02-JUL-1998.

XX XX

XX PF 19-DEC-1997; 97WO-US023619.

XX XX

XX PR 20-DEC-1996; 96US-00770564.

PR PR 20-DEC-1996; 96US-00770565.

XX XX

XX PA (GERO-) GERON CORP.

XX PA

XX PI Kim NW, Wu F, Kealey JT, Pruzan R, Weinrich SL;

XX PI

XX XX WPI; 1998-377670/32.

DR DR

XX XX

XX PT New polynucleotide(s) anti-sense to human telomerase - used for detecting or inhibiting human telomerase, e.g. for treating cancers, contraception, PT PT immuno-suppression or treating infection.

PT PT

XX XX

XX PS Claim 11; Page 65; 80pp; English.

XX XX

CC Sequences shown in AAV41169 to AAV41181 represent antisense CC CC oligonucleotides to the RNA component of human telomerase (hTR). These CC CC antisense oligonucleotides specifically hybridise to a nucleotide CC CC sequence within an accessible region of the hTR, but that does not CC CC hybridise to a sequence within the template region of hTR. These CC CC oligonucleotides may specifically be used for detection of an RNA CC CC component of human telomerase in a sample. This is useful for diagnosing CC CC cancer (especially neuroblastoma, bladder, colon and prostate cancer), CC CC and providing prognosis for a cancer patient. The inhibitory CC CC oligonucleotides can inhibit the telomerase activity level in a cell by CC CC interfering with transcription of the RNA component, decreasing the half- CC CC life of the telomerase RNA component transcript, inhibiting assembly of CC CC the RNA component into the telomerase holoenzyme, or inhibiting the CC CC polymerase activity of telomerase. These antisense oligonucleotides can CC CC be used for inhibiting telomerase activity in both cultured cells and in CC CC cells in vivo. They can be used in therapeutics for treating or CC CC preventing cancer, for contraception or sterilisation, for CC CC immunosuppression, and for selectively down-regulating specific branches CC CC of the immune system, e.g. a specific subset of T-cells, in anti- CC CC inflammatory therapies or for treating infections by, e.g. yeast, CC CC parasites or fungi

XX XX

XX SQ Sequence 30 BP; 6 A; 10 C; 9 G; 5 T; 0 U; 0 Other;

Query Match 6.7%; Score 30; DB 1; Length 30;

Best Local Similarity 100.0%; Pred. No. 32;

Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 290 CTGCCACCGCGAGAGTTGGGCTCTGTCTGTCAG 319

Db 30 CTGCCACCGCGAGAGTTGGGCTCTGTCTGTCAG 1

RESULT 27

AAZ23627/c

ID AAZ23627 standard; DNA; 30 BP.

XX XX

XX AC AAZ23627;

XX XX

DT 07-JAN-2000 (first entry)



```
XX DE Human clone 28-1 telomerase oligonucleotide anti-P.
XX KW Telomerase; human; immune response; cancer; vaccine; treatment; disease;
XX KW primer; ss.
XX OS Synthetic.
XX OS Homo sapiens.
XX FH Key Location/Qualifiers
XX FT modified_base 1
XX FT /*tag= a
XX FT /note= "5'-biotinylated guanosine"
XX PN US968506-A.
XX PD 19-OCT-1999.
XX PP 04-APR-1997; 97US-00833377.
XX PR 04-AUG-1995; 95US-00510736.
XX PR (GERO-) GERON CORP.
XX PA
XX PI Atkinson EM, Lichtsteiner SP, Weinrich SL, Pruzan RA, Kealey JT;
XX PI Vasserot AP;
XX DR WPI; 1999-590379/50.
XX PP Compositions comprising human telomerase, useful for treating diseases
XX PT associated with overexpression of telomerase e.g. cancer.
XX PS Disclosure; Col 43-44; 34pp; English.
XX CC This invention describes a novel composition comprising human telomerase
XX CC having at least 2000-fold (preferably at least 6000-fold) increased
XX CC relative purity compared with crude extract of cells from adenovirus-
XX CC transformed kidney cell line. The composition is useful for eliciting an
XX CC immune response in animals and may therefore be used as a vaccine for
XX CC treating diseases associated with the overexpression of telomerase e.g.
XX CC cancer. AA23626-223637 represent oligonucleotides used in the isolation
XX CC of human clone 28-1 which contains a fragment of the human telomerase
XX CC described in the method of the invention
XX SQ Sequence 30 BP; 6 A; 9 C; 7 G; 8 T; 0 U; 0 Other;
XX
XX Query Match 6.7%; Score 30; DB 1; Length 30;
XX Best Local Similarity 100.0%; Pred. No. 32;
XX Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Oy 43 TGTCTAACCCCTAACTGAGAGGGCGTAGGC 72
Db 30 TGTCTAACCCCTAACTGAGAGGGCGTAGGC 1
RESULT 28
AAZ23630/c
ID AAZ23630 standard; DNA; 30 BP.
XX AC AAZ23630;
XX DT 07-JAN-2000 (first entry)
XX DE Human clone 28-1 telomerase oligonucleotide oligo-13.
XX KW Telomerase; human; immune response; cancer; vaccine; treatment; disease;
XX KW primer; ss.
XX OS Synthetic.
XX OS Homo sapiens.
XX FH Key Location/Qualifiers
XX FT modified_base 1
XX FT /*tag= a
XX FT /note= "5'-biotinylated guanosine"
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FT /*tag= a
XX /note= "5'-biotinylated guanosine"
XX PN US968506-A.
XX PD 19-OCT-1999.
XX PP 04-APR-1997; 97US-00833377.
XX PR 04-AUG-1995; 95US-00510736.
XX PR (GERO-) GERON CORP.
XX PA
XX PI Atkinson EM, Lichtsteiner SP, Weinrich SL, Pruzan RA, Kealey JT;
XX PI Vasserot AP;
XX DR WPI; 1999-590379/50.
XX PP Compositions comprising human telomerase, useful for treating diseases
XX PT associated with overexpression of telomerase e.g. cancer.
XX PS Disclosure; Col 45-46; 34pp; English.
XX CC This invention describes a novel composition comprising human telomerase
XX CC having at least 2000-fold (preferably at least 6000-fold) increased
XX CC relative purity compared with crude extract of cells from adenovirus-
XX CC transformed kidney cell line. The composition is useful for eliciting an
XX CC immune response in animals and may therefore be used as a vaccine for
XX CC treating diseases associated with the overexpression of telomerase e.g.
XX CC cancer. AA23626-223637 represent oligonucleotides used in the isolation
XX CC of human clone 28-1 which contains a fragment of the human telomerase
XX CC described in the method of the invention
XX SQ Sequence 30 BP; 6 A; 6 C; 8 G; 10 T; 0 U; 0 Other;
XX
XX Query Match 6.7%; Score 30; DB 1; Length 30;
XX Best Local Similarity 100.0%; Pred. No. 32;
XX Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Oy 167 AAACAAAATGTCAGCTGCTGCCCGTTC 196
Db 30 AAACAAAATGTCAGCTGCTGCCCGTTC 1
RESULT 29
AAZ23631/c
ID AAZ23631 standard; DNA; 30 BP.
XX AC AAZ23631;
XX DT 07-JAN-2000 (first entry)
XX DE Human clone 28-1 telomerase oligonucleotide oligo-14.
XX KW Telomerase; human; immune response; cancer; vaccine; treatment; disease;
XX KW primer; ss.
XX OS Synthetic.
XX OS Homo sapiens.
XX FH Key Location/Qualifiers
XX FT modified_base 1
XX FT /*tag= a
XX FT /note= "5'-biotinylated guanosine"
XX PN US968506-A.
XX PD 19-OCT-1999.
XX PR 04-APR-1997; 97US-00833377.
XX PR 04-AUG-1995; 95US-00510736.
```

PA (GERO-) GERON CORP.  
XX Atkinson EM, Lichtsteiner SP, Weinrich SL, Pruzan RA, Kealey JT;  
PI Vasserot AP;  
PI WPI; 1999-590379/50.  
XX Compositions comprising human telomerase, useful for treating diseases  
XX associated with overexpression of telomerase e.g. cancer.  
XX Disclosure; Col 45-46; 34pp; English.  
XX This invention describes a novel composition comprising human telomerase  
XX having at least 2000-fold (preferably at least 6000-fold) increased  
XX relative purity compared with crude extract of cells from adenovirus-  
XX transformed kidney cell line. The composition is useful for eliciting an  
XX immune response in animals and may therefore be used as a vaccine for  
XX treating diseases associated with the overexpression of telomerase e.g.  
XX cancer. AAZ23626-223637 represent oligonucleotides used in the isolation  
XX of human clone 28-1 which contains a fragment of the human telomerase  
XX described in the method of the invention  
XX Sequence 30 BP; 8 A; 5 C; 13 G; 4 T; 0 U; 0 Other;  
SQ Query Match 6.7%; Score 30; DB 1; Length 30;  
Best Local Similarity 100.0%; Pred. No. 32;  
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 137 CCTGCCGCTTCCACCGTTTCATTCTAGAGC 166  
DB 30 CCTGCCGCTTCCACCGTTTCATTCTAGAGC 1  
RESULT 30  
AAS15928/C  
ID AAS15928 standard; DNA; 30 BP.  
XX AAS15928;  
AC AAS15928;  
XX 27-FEB-2002 (first entry)  
DT Human telomerase polynucleotide inhibitor #9.  
DE Human; telomerase; hTR; cytostatic; anti-inflammatory; adenocarcinoma;  
XX breast; prostate; colon; mixed cell leukaemia; Hodgkin's disease;  
KW fertility; inflammatory condition; tumour; cancer; veterinary;  
KW immunosuppression; telomerase inhibitor; ss.  
XX Homo sapiens.  
OS Synthetic.  
XX Key Location/Qualifiers  
FH modified\_base 1..30  
FT /\*tag= a  
FT /mod\_base= OTHER  
FT /note= "N3'-P5' phosphoramidate linkages"  
FT  
FT  
XX WO200174136-A2.  
XX  
XX 11-OCT-2001.  
XX  
XX 30-MAR-2001; 2001WO-US010476.  
XX  
XX 31-MAR-2000; 2000US-00540119.  
XX (GERO-) GERON CORP.  
PA Gryaznov SM, Pruzan R, Weinrich SL;  
XX WPI; 2001-656955/75.  
XX  
XX New polynucleotide useful for inhibiting telomerase activity in cells, or  
XX for treating telomerase-mediated condition or disease, such as cancers,  
PT

PT tumors, Hodgkin's disease, or inflammatory conditions.  
XX Example 3; Page 32; 48pp; English.  
XX The invention relates to polynucleotide inhibitors (I) and methods for  
XX inhibiting telomerase activity. (I) are useful in inhibiting telomerase  
XX activity and proliferation of a telomerase positive cell, and in  
XX manufacturing a medicament for inhibiting telomerase activity in a cell  
XX and in treating telomerase-mediated condition or disease, such as  
XX adenocarcinoma of breast, prostate or colon, mixed cell leukaemia,  
XX Hodgkin's disease, fertility and inflammatory conditions. (I) are also  
XX useful in treating a tumour or in manufacturing a medicament for the  
XX treatment of tumour. The polynucleotide inhibitors may also be used in  
XX diagnostic assays for detecting RNA or DNA. Inhibition of telomerase  
XX activity in cells in vivo is useful in prophylactic and therapeutic  
XX methods of treating cancer and other disorders involving inappropriate  
XX expression of telomerase, and in treating veterinary proliferative  
XX diseases. Inhibition of telomerase in haematopoietic stem cells is useful  
XX for immunosuppression and for selectively down-regulating specific  
XX branches of the immune system. The present sequence represents human  
XX telomerase polynucleotide inhibitor #9, as described in the method of the  
XX invention  
XX Sequence 30 BP; 8 A; 5 C; 13 G; 4 T; 0 U; 0 Other;  
SQ Query Match 6.7%; Score 30; DB 1; Length 30;  
Best Local Similarity 100.0%; Pred. No. 32;  
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 137 CCTGCCGCTTCCACCGTTTCATTCTAGAGC 166  
DB 30 CCTGCCGCTTCCACCGTTTCATTCTAGAGC 1  
RESULT 31  
AAS09476/C  
ID AAS09476 standard; DNA; 30 BP.  
XX AAS09476;  
AC AAS09476;  
XX 24-OCT-2001 (first entry)  
DT Antisense oligonucleotide for human telomerase, Oligo 14.  
DE Human; Telomerase; vaccine; antibody; cancer; EF2H; nucleolin;  
XX Antisense oligonucleotide; Oligo 14; ss.  
KW Homo sapiens.  
XX Key Location/Qualifiers  
FH modified\_base 1  
FT /\*tag= a  
FT /mod\_base= G  
FT /note= "G is biotinylated"  
FT  
XX US6261556-B1.  
XX 17-JUL-2001.  
XX 18-OCT-1999; 99US-00420056.  
XX 04-AUG-1995; 95US-00510736.  
XX 04-APR-1997; 97US-00833377.  
XX (GERO-) GERON CORP.  
PA Weinrich SL, Atkinson EM, Lichtsteiner SP, Vasserot AP, Pruzan RA;  
XX Kealey JT;  
XX WPI; 2001-450477/48.  
XX Purified human telomerase, useful for inducing immune response in  
XX animals, comprises several thousand folds increased purity compared with  
PT



CC The present sequence is that of an oligonucleotide prepared using  
 CC phosphoramidite chemistry. A nanoparticle conjugate was prepared by  
 CC joining the 5'-mercaptoalkyl oligonucleotide to gold nanoparticles. The  
 CC nanoparticle conjugate was used to enhance the sandwich amplification of  
 CC a silver signal on glass slides containing silver sports from  
 CC oligonucleotide assays performed using silver staining. This illustrated  
 CC the method of the invention, which is based on the discoveries that: (1)  
 CC gold nanoparticles coated with oligonucleotides bind to silver that has  
 CC previously been deposited on gold nanoparticle-oligonucleotide conjugates  
 CC immobilised by hybridisation on a glass substrate or plate; and (2) that  
 CC the gold-nanoparticle-oligonucleotide-silver-gold oligonucleotide  
 CC structures function as a catalyst for the further deposition of silver  
 CC ions. The discoveries were applied to a method for amplifying signal by  
 CC enhancing silver deposition in detecting systems where the formation of a  
 CC silver spot serves as a reporter for the presence of a molecule,  
 CC including proteins, nucleic acids and small molecules. The detecting  
 CC systems include detection of molecules in situ (e.g. on cells or in a  
 CC tissue sample) and assays where the target molecule is bound to a  
 CC substrate or is captured by a capture molecule. The method has special  
 CC utility in increasing the signal strength in diagnostic and screening  
 CC applications involving detection of target molecules arrayed at discrete  
 CC positions on a solid surface. It provides a means for greatly enhancing  
 CC the sensitivity of tests carried out on microarrays or microchips. The  
 CC method is simple, economical, and provides a large enhancement in signal  
 CC and sensitivity

XX Sequence 30 BP; 8 A; 5 C; 13 G; 4 T; 0 U; 0 Other;

Query Match 6.7%; Score 30; DB 1; Length 30;  
 Best Local Similarity 100.0%; Pred. No. 32;  
 Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 137 CCTGCCGCTTCCACCGCTTCATCTAGAGC 166  
 DB |||||||||||||||||||||||||||||  
 30 CCTGCCGCTTCCACCGCTTCATCTAGAGC 1

RESULT 34  
 ABX10985/C  
 ID ABX10985 standard; DNA; 30 BP.  
 AC ABX10985;  
 XX  
 XX 17-AUG-2003 (first entry)  
 DT Human telomerase antisense oligonucleotide primer oligol3.  
 DE  
 XX Telomerase; antisense; primer; oligol3; ss; cancer.  
 KW  
 XX Synthetic.  
 OS  
 XX Key Location/Qualifiers  
 FH modified\_base 1  
 FT /\*tag= a  
 FT /note= "Biotinylated"  
 FT  
 XX US6517834-B1.  
 XX  
 XX 11-FEB-2003.  
 XX  
 XX 20-NOV-2000; 2000US-00717828.  
 XX  
 XX 04-AUG-1995; 95US-00510736.  
 PR 04-APR-1997; 97US-00833377.  
 PR 18-OCT-1999; 99US-00420056.  
 XX  
 XX (GERO-) GERON CORP.  
 PA  
 XX Weinrich SL, Atkinson EM, Lichtsteiner SP, Vasserot AP, Pruzan RA;  
 PI WPI; 2003-465598/44.  
 XX  
 XX Composition useful e.g. in diagnosis of cancer comprises complex of

PT telomerase protein with telomerase RNA component.

XX Disclosure; Col 9; 24pp; English.

XX This invention relates to a purified human telomerase protein, which when  
 CC associated with telomerase RNA component has DNA polymerase activity.  
 CC Also disclosed in the specification is a method for assessing a regulator  
 CC (preferably a telomerase inhibitor or activator of telomerase involves  
 CC measuring telomerase enzymatic activity of the composition in presence of  
 CC a regulator. The telomerase protein of the invention may be used in  
 CC developing and testing assays for measuring telomerase activity which are  
 CC useful in characterising cancer and pre-cancer cells, for identifying and  
 CC testing regulators of telomerase activity in in vitro assay and for  
 CC preparing antibodies against telomerase. The mammalian telomerase protein  
 CC of the invention is at least approximately 3000 fold more pure (in terms  
 CC of telomerase activity per weight of protein) than a crude extract of  
 CC cell from adenovirus-transformed kidney cell. Purified telomerase  
 CC facilitates a thorough biochemical analysis of the enzyme's mechanism for  
 CC developing mechanism-based regulators. The present sequence represents a  
 CC human telomerase antisense oligonucleotide which has affinity to  
 CC telomerase and is used to purify the telomerase protein of the invention

XX Sequence 30 BP; 6 A; 6 C; 8 G; 10 T; 0 U; 0 Other;

Query Match 6.7%; Score 30; DB 1; Length 30;  
 Best Local Similarity 100.0%; Pred. No. 32;  
 Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 167 AAACAAAATGTCAGCTGCGCCGTTTC 196  
 DB |||||||||||||||||||||||||||||  
 30 AAACAAAATGTCAGCTGCGCCGTTTC 1

RESULT 35  
 ABX10986/C  
 ID ABX10986 standard; DNA; 30 BP.  
 AC ABX10986;  
 XX  
 XX 17-AUG-2003 (first entry)  
 DT Human telomerase antisense oligonucleotide primer oligol4.  
 DE  
 XX Telomerase; antisense; primer; oligol4; ss; cancer.  
 KW  
 XX Synthetic.  
 OS  
 XX Key Location/Qualifiers  
 FH modified\_base 1  
 FT /\*tag= a  
 FT /note= "Biotinylated"  
 FT  
 XX US6517834-B1.  
 XX  
 XX 11-FEB-2003.  
 XX  
 XX 20-NOV-2000; 2000US-00717828.  
 XX  
 XX 04-AUG-1995; 95US-00510736.  
 PR 04-APR-1997; 97US-00833377.  
 PR 18-OCT-1999; 99US-00420056.  
 XX  
 XX (GERO-) GERON CORP.  
 PA  
 XX Weinrich SL, Atkinson EM, Lichtsteiner SP, Vasserot AP, Pruzan RA;  
 PI WPI; 2003-465598/44.  
 XX  
 XX Composition useful e.g. in diagnosis of cancer comprises complex of  
 PT telomerase protein with telomerase RNA component.  
 XX Disclosure; Col 9; 24pp; English.



CC oligonucleotide (O) having specific affinity for (I), and collecting  
CC protein bound to (O). The oligonucleotide comprises a retrievable label  
CC such as biotin and contains a sequence that is specifically recognized by  
CC telomerase protein. The oligonucleotide contains or does not contain the  
CC sequence (TTAGGG)<sub>3</sub>. The method further comprises combining a fraction  
CC containing telomerase protein with an anion exchange matrix, and  
CC collecting protein that binds the matrix, combining a fraction containing  
CC telomerase protein with a cation exchange matrix (such as a heparin  
CC matrix), and collecting protein that binds the matrix. The method  
CC comprises successively enriching fractions containing telomerase protein  
CC on several different ion exchange matrices and combining a fraction  
CC containing telomerase protein with an intermediate selectivity matrix,  
CC collecting protein that binds the matrix, where the intermediate  
CC selectivity matrix and separating a fraction containing the telomerase  
CC protein by gel filtration chromatography or gradient centrifugation. The  
CC telomerase is enriched from an extract of cells stably expressing  
CC telomerase. This sequence represents an antisense oligonucleotide to the  
CC RNA component of human telomerase that can be used in the purification  
CC method of the invention.

XX SQ Sequence 30 BP; 6 A; 6 C; 8 G; 10 T; 0 U; 0 Other;  
Query Match 6.7%; Score 30; DB 1; Length 30;  
Best Local Similarity 100.0%; Pred. No. 32;  
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 167 AACACAAAATGTCAGCTGCTGCGCCGTTTC 196  
|||||  
Db 30 AACACAAAATGTCAGCTGCTGCGCCGTTTC 1

RESULT 38  
ADG62873/c  
ID ADG62873 standard; DNA; 30 BP.  
XX AC  
XX AC  
XX AC  
XX 11-MAR-2004 (first entry)  
XX Human telomerase RNA antisense oligonucleotide, oligo 13.  
XX DE  
XX DE  
XX KW Telomerase activity; therapy; cancer; cytostatic; antisense; ss.  
XX OS Homo sapiens.  
XX OS

Key modified\_base 1 Location/Qualifiers  
FT /\*tag= a  
FT /mod\_base= OTHER  
FT /note= "Biotin labelled"

US2003186282-A1.

02-OCT-2003.

24-DEC-2002; 2002US-00330872.

04-AUG-1995; 95US-00510736.  
04-APR-1997; 97US-00833377.  
18-OCT-1999; 99US-00420056.  
20-NOV-2000; 2000US-00717828.

(WEIN/) WEINRICH S L.  
PA (ATKI/) ATKINSON E M.  
PA (LICH/) LICHTSTEINER S P.  
PA (VASS/) VASSEROT A P.  
PA (PRUZ/) PRUZAN R A.

XX Weinrich SL, Atkinson EM, Lichtsteiner SP, Vasserot AP, Pruzan RA;  
XX WPI; 2003-811733/76.  
XX Identifying telomerase regulators useful for treating cancer.

XX PS Disclosure; SEQ ID NO 4; 22pp; English.  
XX CC The invention relates to a method for identifying regulators of  
XX telomerase activity that may be useful for treating cancers. The method  
XX may be used to identify regulators e.g. antibodies, of telomerase  
XX activity which may be useful as cancer treatments. It has been found that  
XX found that the cells of many human cancers have telomerase activity. This  
XX helps explain why cancer cells continue dividing without becoming  
XX senescent. If telomerase activity in cancer cells can be inhibited, the  
XX cancer cells are expected to reach senescence and cease dividing. The  
XX present sequence is human telomerase antisense oligonucleotide used to  
XX illustrate the method of the invention.

XX SQ Sequence 30 BP; 6 A; 6 C; 8 G; 10 T; 0 U; 0 Other;

Query Match 6.7%; Score 30; DB 1; Length 30;  
Best Local Similarity 100.0%; Pred. No. 32;  
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 167 AACACAAAATGTCAGCTGCTGCGCCGTTTC 196  
|||||  
Db 30 AACACAAAATGTCAGCTGCTGCGCCGTTTC 1

RESULT 39  
ADG62874/c

ID ADG62874 standard; DNA; 30 BP.

XX AC  
XX AC  
XX AC

XX 11-MAR-2004 (first entry)

XX Human telomerase RNA antisense oligonucleotide, oligo 14.

XX DE  
XX DE  
XX KW Telomerase activity; therapy; cancer; cytostatic; antisense; ss.

XX OS Homo sapiens.

Key modified\_base 1 Location/Qualifiers  
FT /\*tag= a  
FT /mod\_base= OTHER  
FT /note= "Biotin labelled"

US2003186282-A1.

02-OCT-2003.

24-DEC-2002; 2002US-00330872.

04-AUG-1995; 95US-00510736.  
04-APR-1997; 97US-00833377.  
18-OCT-1999; 99US-00420056.  
20-NOV-2000; 2000US-00717828.

(WEIN/) WEINRICH S L.  
PA (ATKI/) ATKINSON E M.  
PA (LICH/) LICHTSTEINER S P.  
PA (VASS/) VASSEROT A P.  
PA (PRUZ/) PRUZAN R A.

XX Weinrich SL, Atkinson EM, Lichtsteiner SP, Vasserot AP, Pruzan RA;  
XX WPI; 2003-811733/76.  
XX Identifying telomerase regulators useful for treating cancer.

XX PS Disclosure; SEQ ID NO 5; 22pp; English.

XX CC The invention relates to a method for identifying regulators of

XX telomerase activity that may be useful for treating cancers. The method  
XX may be used to identify regulators e.g. antibodies, of telomerase

CC activity which may be useful as cancer treatments. It has been found that  
CC found that the cells of many human cancers have telomerase activity. This  
CC helps explain why cancer cells continue dividing without becoming  
CC senescent. If telomerase activity in cancer cells can be inhibited, the  
CC cancer cells are expected to reach senescence and cease dividing. The  
CC present sequence is human telomerase antisense oligonucleotide used to  
CC illustrate the method of the invention.

XX  
SQ Sequence 30 BP; 8 A; 5 C; 13 G; 4 T; 0 U; 0 Other;

Query Match 6.7%; Score 30; DB 1; Length 30;  
Best Local Similarity 100.0%; Pred. No. 32;  
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 137 CCTGCCCGCTTCCACCGTTTCATTCTAGAGC 166  
Db 30 CCTGCCCGCTTCCACCGTTTCATTCTAGAGC 1

RESULT 40  
AAV63647/C

ID AAV63647 standard; DNA; 30 BP.

XX AAV63647;

XX 15-FEB-1999 (first entry)

XX Antisense oligonucleotide 5 for human telomerase RNA component.

XX Human; telomerase RNA component; anticancer therapy; purification; assay;  
XX vaccine; cancer; antisense oligonucleotide; ss.

XX Synthetic.

XX Homo sapiens.

XX Key Location/Qualifiers  
FT modified\_base 1  
FT /\*tag= a  
FT /note= "biotinylated"

XX WO9845450-A1.

XX 15-OCT-1998.

XX 04-APR-1997; 97WO-US006012.

XX 04-APR-1997; 97WO-US006012.

XX (GERO-) GERON CORP.

XX Weinrich SL, Atkinson EM, Lichtsteiner SP, Vasserot AP, Pruzan RA;  
XX Kealey JT;

XX WPI; 1998-594485/50.

XX Purification of telomerase on affinity material - useful for, e.g.  
XX diagnosis and treatment of cancer.

XX Example 3; Page 47; 76pp; English.

XX The present sequence represents an antisense oligonucleotide directed  
XX against the human telomerase RNA component gene sequences. The  
XX oligonucleotide can be used as an affinity agent in the methods of the  
XX invention, which are used to purify human telomerase. The methods involve  
XX the use of several sequential steps, including the use of two matrices  
XX that bind molecules bearing negative charges, a matrix that binds  
XX molecules bearing positive charges, an affinity purification step and a  
XX size separation. Telomerase is a particular target of anticancer  
XX therapies, and is useful in assays for characterizing (pre)cancerous  
XX cells. Telomerase can also be used to screen for specific modulators, for  
XX biochemical analysis of its activity, and in preparation of antibodies.  
XX Fragments of telomerase, or nucleic acid encoding them, are used in  
XX vaccines, and for treating over expression of telomerase, particularly in

CC cancer

XX Sequence 30 BP; 4 A; 11 C; 9 G; 6 T; 0 U; 0 Other;

Query Match 6.3%; Score 28.4; DB 1; Length 30;  
Best Local Similarity 96.7%; Pred. No. 45;  
Matches 29; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 412 GAGCTGTGGACGTGCACCCAGGACTCGGC 441  
Db 30 GAGCTATGGACGTGCACCCAGGACTCGGC 1

RESULT 41  
AAZ23629/C

ID AAZ23629 standard; DNA; 30 BP.

XX AAZ23629;

XX 07-JAN-2000 (first entry)

XX Human clone 28-1 telomerase oligonucleotide oligo-5.

XX Telomerase; human; immune response; cancer; vaccine; treatment; disease;  
XX primer; ss.

XX Synthetic.

XX Homo sapiens.

XX Key Location/Qualifiers  
FT modified\_base 1  
FT /\*tag= a  
FT /note= "5'-biotinylated guanosine"

XX US968506-A.

XX 19-OCT-1999.

XX 04-APR-1997; 97US-00833377.

XX 04-AUG-1995; 95US-00510736.

XX (GERO-) GERON CORP.

XX Atkinson EM, Lichtsteiner SP, Weinrich SL, Pruzan RA, Kealey JT;  
XX Vasserot AP;

XX WPI; 1999-590379/50.

XX Compositions comprising human telomerase, useful for treating diseases  
XX associated with overexpression of telomerase e.g. cancer.

XX Disclosure; Col 43-44; 34pp; English.

XX This invention describes a novel composition comprising human telomerase  
XX having at least 2000-fold (preferably at least 6000-fold) increased  
XX relative purity compared with crude extract of cells from adenovirus-  
XX transformed kidney cell line. The composition is useful for eliciting an  
XX immune response in animals and may therefore be used as a vaccine for  
XX treating diseases associated with the overexpression of telomerase e.g.  
XX cancer. AAZ23626-223637 represent oligonucleotides used in the isolation  
XX of human clone 28-1 which contains a fragment of the human telomerase  
XX described in the method of the invention

XX Sequence 30 BP; 4 A; 11 C; 9 G; 6 T; 0 U; 0 Other;

Query Match 6.3%; Score 28.4; DB 1; Length 30;  
Best Local Similarity 96.7%; Pred. No. 45;  
Matches 29; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 412 GAGCTGTGGACGTGCACCCAGGACTCGGC 441  
Db 30 GAGCTATGGACGTGCACCCAGGACTCGGC 1

```
RESULT 42
ID AAS09474/c
XX AAS09474 standard; DNA; 30 BP.
AC AAS09474;
XX
XX
DT 24-OCT-2001 (first entry)
XX
XX Antisense oligonucleotide for human telomerase, Oligo 5.
DE
XX Human; Telomerase; vaccine; antibody; cancer; EF2H; nucleolin;
KW antisense oligonucleotide; Oligo 5; ss.
XX
XX Homo sapiens.
OS
XX
XX Key Location/Qualifiers
FH modified_base 1
FT /*tag= a
FT /mod_base= G
FT /note= "G is biotinylated"
XX
XX US6261556-B1.
PN
XX
XX 17-JUL-2001.
XX
XX 18-OCT-1999; 99US-00420056.
XX
XX 04-AUG-1995; 95US-00510736.
PR 04-APR-1997; 97US-00833377.
XX
XX (GERO-) GERON CORP.
PA
XX
XX Weinrich SL, Atkinson EM, Lichtsteiner SP, Vasserot AP, Pruzan RA;
PI Kealey JT;
XX
XX WPI; 2001-450477/48.
DR
XX
XX Purified human telomerase, useful for inducing immune response in
PT animals, comprises several thousand folds increased purity compared with
PT cytoplasmic crude cell preparations.
XX
XX Disclosure; Col 18; 29pp; English.
PS
XX
XX The sequence represents a biotinylated antisense oligonucleotide used in
XX the purification of human telomerase. The invention relates to a purified
XX human telomerase core enzyme protein comprising 2000-fold increased
XX purity compared with a crude extract of cells from adenovirus-transformed
XX kidney cell line (293 cells) and when associated with telomerase RNA
XX component has DNA polymerase activity and a molecular weight of 200-2000
XX kilo Daltons (kDa). The purified telomerase is useful for inducing a
XX humoral or cell-mediated immune response in an animal. Purified
XX telomerase or immunogenic fragments are useful as vaccines for treating
XX diseases associated with over-expression of telomerase, such as cancer
XX and for producing antibodies that recognize telomerase, which are useful
XX as affinity agents in isolating the proteins and for detecting the
XX presence of proteins in a sample, such as cell or tissue. Identification
XX of telomerase aids in diagnosis of cancer or pre-cancerous states.
XX Telomerase and/or telomerase associated proteins are also useful for
XX screening compounds to identify agents that alter the association of
XX telomerase-associated proteins, such as nucleolin or EF2H with telomerase
XX
XX Sequence 30 BP; 4 A; 11 C; 9 G; 6 T; 0 U; 0 Other;
Query Match 6.3%; Score 28.4; DB 1; Length 30;
Best Local Similarity 96.7%; Pred. No. 45;
Matches 29; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 412 GAGCTGTGGGACGTGCACCCAGGACTCGGC 441
DB 30 GAGCTATGGGACGTGCACCCAGGACTCGGC 1
```

```
RESULT 43
ID ABX10984/c
XX ABX10984 standard; DNA; 30 BP.
AC ABX10984;
XX
XX
DT 17-AUG-2003 (first entry)
XX
XX Human telomerase antisense oligonucleotide primer oligos.
DE
XX Telomerase; antisense; primer; oligo5; ss; cancer.
KW
XX Synthetic.
OS
XX
XX Key Location/Qualifiers
FH modified_base 1
FT /*tag= a
FT /note= "Biotinylated"
XX
XX US6517834-B1.
PN
XX
XX 11-FEB-2003.
XX
XX 20-NOV-2000; 2000US-00717828.
XX
XX 04-AUG-1995; 95US-00510736.
PR 04-APR-1997; 97US-00833377.
XX 18-OCT-1999; 99US-00420056.
XX
XX (GERO-) GERON CORP.
PA
XX
XX Weinrich SL, Atkinson EM, Lichtsteiner SP, Vasserot AP, Pruzan RA;
PI WPI; 2003-465598/44.
XX
XX Composition useful e.g. in diagnosis of cancer comprises complex of
PT telomerase protein with telomerase RNA component.
XX
XX Claim 13; Col 9; 24pp; English.
PS
XX
XX This invention relates to a purified human telomerase protein, which when
XX associated with telomerase RNA component has DNA polymerase activity,
XX Also disclosed in the specification is a method for assessing a regulator
XX (preferably a telomerase inhibitor or activator of telomerase involves
XX measuring telomerase enzymatic activity of the composition in presence of
XX a regulator. The telomerase protein of the invention may be used in
XX a testing and testing assays for measuring telomerase activity which are
XX useful in characterizing cancer and pre-cancer cells, for identifying and
XX testing regulators of telomerase activity in in vitro assay and for
XX preparing antibodies against telomerase. The mammalian telomerase protein
XX of the invention is at least approximately 3000 fold more pure (in terms
XX of telomerase activity per weight of protein) than a crude extract of
XX cell from adenovirus-transformed kidney cell. Purified telomerase
XX facilitates a thorough biochemical analysis of the enzyme's mechanism for
XX developing mechanism-based regulators. The present sequence represents a
XX human telomerase antisense oligonucleotide which has affinity to
XX telomerase and is used to purify the telomerase protein of the invention
XX
XX Sequence 30 BP; 4 A; 11 C; 9 G; 6 T; 0 U; 0 Other;
Query Match 6.3%; Score 28.4; DB 1; Length 30;
Best Local Similarity 96.7%; Pred. No. 45;
Matches 29; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 412 GAGCTGTGGGACGTGCACCCAGGACTCGGC 441
DB 30 GAGCTATGGGACGTGCACCCAGGACTCGGC 1
```

```
RESULT 44
ID ADC35650/c
ID ADC35650 standard; DNA; 30 BP.
```





DE Human telomerase RNA specific PCR primer-1.  
 KW PCR primer; human telomerase RNA; hTR; amplify; human staufen cDNA;  
 KW hStau; synthesised; random hexamer primer;  
 KW Superscript II reverse transcriptase; ss.  
 XX Synthetic.  
 OS Homo sapiens.  
 XX WO9951255-A1.  
 XX 14-OCT-1999.  
 XX 06-APR-1999; 99WO-US007533.  
 XX 06-APR-1998; 98US-0080783P.  
 XX (UYUJ ) UNIV JOHNS HOPKINS SCHOOL MEDICINE.  
 XX Greider CW, Le S;  
 XX WPI; 1999-620168/53.  
 XX Human staufen polypeptide useful in methods for identifying telomerase  
 PT inhibitors.  
 XX Disclosure; Page 15; 50pp; English.  
 CC The present sequence is a PCR primer specific to human telomerase RNA  
 CC (hTR). It is used to amplify human staufen (hStau) cDNA synthesised using  
 CC random hexamer primers and Superscript II reverse transcriptase  
 XX Sequence 28 BP; 2 A; 4 C; 13 G; 9 T; 0 U; 0 Other;  
 SQ

Query Match 6.2%; Score 28; DB 1; Length 28;  
 Best Local Similarity 100.0%; Pred. No. 44;  
 Matches 28; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 17 GCCTGGGAGGGGTGGTGGCCATTTTTG 44  
 |||||  
 DB 1 GCCTGGGAGGGGTGGTGGCCATTTTTG 28

RESULT 47  
 AAV41193/c  
 ID AAV41193 standard; DNA; 27 BP.  
 XX AAV41193;  
 AC AAV41193;  
 DT 08-OCT-1998 (first entry)  
 XX RNA component of human telomerase (hTR) amplifying reverse primer.  
 DE  
 XX RNA component; human telomerase; antisense oligonucleotide; infection;  
 KW neuroblastoma; bladder cancer; colon cancer; prostate cancer; cancer;  
 KW contraception; sterilisation; immunosuppression; therapeutic; hTR;  
 KW immune system down-regulation; anti-inflammatory therapy; RT-PCR; primer;  
 KW ss.  
 XX Synthetic.  
 OS Homo sapiens.  
 XX WO9828442-A1.  
 XX 02-JUL-1998.  
 XX 19-DEC-1997; 97WO-US023619.  
 XX 20-DEC-1996; 96US-00770564.  
 XX 20-DEC-1996; 96US-00770565.  
 XX (GERO-) GERON CORP.  
 PA New human GC6 gene, useful for identifying agents for treating diseases  
 PT and/or conditions associated with cell senescence.

PI Kim NW, Wu F, Kealey JT, Pruzan R, Weinrich SL;  
 XX WPI; 1998-377670/32.  
 DR New polynucleotide(s) anti:sense to human telomerase - used for detecting  
 PT or inhibiting human telomerase, e.g. for treating cancers, contraception,  
 PT immuno-suppression or treating infection.  
 XX Claim 65; Page 75; 80pp; English.  
 XX This primer is used for the RT-PCR amplification of an RNA component of  
 CC human telomerase (hTR). This is used in the method of invention of  
 CC determining the amount of hTR in a sample. The method comprises  
 CC amplifying a sequence of hTR and a control polynucleotide from a sample  
 CC and determining an amount of amplified hTR and an amount of amplified  
 CC control polynucleotide. The amount of amplified hTR is normalised with  
 CC respect to the amount of amplified control polynucleotide to provide a  
 CC normalised amount of hTR which provides a determination of the amount of  
 CC hTR in the sample. The invention provides antisense oligonucleotides to  
 CC the hTR which may specifically be used for detection of an RNA component  
 CC of human telomerase in a sample. This is useful for diagnosing cancer  
 CC (especially neuroblastoma, bladder, colon and prostate cancer), and  
 CC providing prognosis for a cancer patient. The antisense oligonucleotides  
 CC can be used for inhibiting telomerase activity in both cultured cells and  
 CC in cells in vivo. They can be used in therapeutics for treating or  
 CC preventing cancer, for contraception or sterilisation, for  
 CC immunosuppression, and for selectively down-regulating specific branches  
 CC of the immune system, e.g. a specific subset of T-cells, in anti-  
 CC inflammatory therapies or for treating infections by, e.g. yeast,  
 CC parasites or fungi  
 XX Sequence 27 BP; 7 A; 3 C; 10 G; 7 T; 0 U; 0 Other;  
 SQ

Query Match 6.0%; Score 27; DB 1; Length 27;  
 Best Local Similarity 100.0%; Pred. No. 51;  
 Matches 27; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 144 CCTTCACCGTTCATCTAGAGCAAC 170  
 |||||  
 DB 27 CCTTCACCGTTCATCTAGAGCAAC 1

RESULT 48  
 AAX77130/c  
 ID AAX77130 standard; DNA; 27 BP.  
 XX AAX77130;  
 AC AAX77130;  
 DT 03-AUG-1999 (first entry)  
 XX PCR primer hTR445 comp.  
 DE Cellular senescence; modulator; GC6 gene; senescent gene expression;  
 XX pGC6; human; PCR primer; ss.  
 KW Synthetic.  
 OS WO9925878-A2.  
 XX 27-MAY-1999.  
 PD 19-NOV-1998; 98WO-US024996.  
 XX 19-NOV-1997; 97US-00974180.  
 XX (GERO-) GERON CORP.  
 PA Funk W;  
 PI WPI; 1999-347496/29.  
 DR New human GC6 gene, useful for identifying agents for treating diseases  
 XX and/or conditions associated with cell senescence.  
 PT

XX Example 5; Page 74; 79pp; English.

XX The invention relates to methods for modulating and identifying cellular

CC senescence. Recombinant expression vectors comprising a recombinant

CC polynucleotide corresponding to a polynucleotide in a human GC6 gene, are

CC useful for altering senescent gene expression. The vectors and host cells

CC comprising the vectors are useful for identifying agents that prevent or

CC modulate senescent gene expression. The polynucleotides are useful for

CC producing the protein, pGC6 and nucleic acid derivatives. The proteins

CC encoded are useful for raising antibodies specific for pGC6, which are

CC useful for isolating pGC6, and for detecting cells comprising pGC6 in

CC complex cell mixtures. The characterization of the polynucleotides enable

CC the identification of therapeutic agents that identify and distinguish

CC between young and senescent cells. This enables treatment of aging

CC diseases induced or exacerbated by cellular senescence

XX

XX Sequence 27 BP; 4 A; 6 C; 11 G; 6 T; 0 U; 0 Other;

XX

Query Match 6.0%; Score 27; DB 1; Length 27;

Best Local Similarity 100.0%; Pred. No. 51;

Matches 27; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 425 TGCACCCAGGACTCGGCTCACACATGC 451

DB 27 TGCACCCAGGACTCGGCTCACACATGC 1

RESULT 49

ABA95497/C

ID ABA95497 standard; DNA; 27 BP.

XX

AC ABA95497;

XX

DT 12-MAR-2002 (first entry)

XX

DE Human telomerase RNA, hTR, antisense PCR primer.

XX

KW Human; telomerase RNA; PCR primer; cancer; breast; ovarian; stomach;

KW colon; hTR; ss.

XX

OS Homo sapiens.

XX

PN EP1158055-A1.

XX

PD 28-NOV-2001.

XX

PF 26-MAY-2000; 2000EP-00111370.

XX

PR 26-MAY-2000; 2000EP-00111370.

XX

PA (CHEN/) CHEN X Q.

PA (STRO/) STROUN M.

PA (ANKR/) ANKER P.

XX

PI Chen XQ, Stroun M, Anker P;

XX

DR WPI; 2002-099090/14.

XX

PT Accurate, reliable diagnosis and/or prognosis of cancer, e.g. breast

PT cancer, by analyzing the RNA components of telomerase in plasma or serum.

XX

PS Example; Col 3; 6pp; French.

XX

CC The present invention relates to a method for diagnosing and/or

CC monitoring the evolution of cancers. The method comprises analysing

CC enzyme telomerase RNA in blood plasma or serum. The method is typically

CC used for diagnosing breast, ovarian, stomach or colon cancer and/or

CC monitoring the evolution of the cancers after treatment by chemotherapy

CC or operations. The present sequence is a PCR primer for human telomerase

CC RNA (hTR), which was used in the example from the present invention

XX

XX Sequence 27 BP; 7 A; 3 C; 10 G; 7 T; 0 U; 0 Other;

XX

QY 46 CTAACCTTAAGGAGGCGTAGGCGCC 75  
 Db 30 CTAACCTTAAGGAGGCGTAGGATCC 1

## RESULT 51

AA110309  
 ID AA110309 standard; DNA; 28 BP.  
 XX  
 AC AA110309;  
 XX  
 DT 10-SEP-1996 (first entry)  
 XX  
 XX RNA component of human telomerase PRINS forward primer.  
 XX  
 KW RNA component; human; telomerase; forward primer; PRINS;  
 KW recombinant production; synthesis; mutant; detection; mammalian;  
 KW identification; modulating agent; neoplastic condition;  
 KW transcriptional regulatory sequence; gene therapy; disease;  
 KW primed in situ labelling; ss.  
 XX  
 OS Synthetic.  
 XX  
 PN WO9601835-A1.  
 XX  
 PD 25-JAN-1996.  
 XX  
 PF 06-JUL-1995; 95WO-US008530.  
 XX  
 PR 07-JUL-1994; 94US-00272102.  
 PR 27-OCT-1994; 94US-00330123.  
 PR 07-JUN-1995; 95US-00472802.  
 PR 07-JUN-1995; 95US-00482115.  
 XX  
 PA (GERO-) GERON CORP.  
 XX  
 PI Villeponteau B, Feng J, Funk W, Andrews WH;  
 XX  
 DR WPI; 1996-097581/10.  
 XX  
 PT RNA component of mammalian telomerase, esp. human - useful in identifying  
 PT e.g. candidate telomerase-modulating agents.  
 XX  
 PS Example 13; Page 91; 114pp; English.  
 XX

XX The present sequence, a forward primer for the RNA component of human  
 CC telomerase (RCHT), was used in a primed in situ labelling (PRINS)  
 CC procedure. The RCHT can be used in the recombinant prodn. of an active  
 CC telomerase mol., capable of adding sequences to chromosomal DNA  
 CC telomeres, and in the synthesis of mutant sequences for the detection of  
 CC mutant mammalian telomerase RNA component polynucleotides. The RCHT may  
 CC also be used in the identification of telomerase modulating agents, and  
 CC in the detection of telomerase related, or neoplastic conditions in a  
 CC patient. Polynucleotides of at least 25 consecutive nucleotides  
 CC identical, or complementary to the RCHT sequence linked to heterologous  
 CC transcriptional regulatory sequences, can be used for the gene therapy of  
 CC human diseases  
 XX  
 SQ Sequence 28 BP; 2 A; 3 C; 13 G; 10 T; 0 U; 0 Other;  
 Query Match 5.9%; Score 26.4; DB 1; Length 28;  
 Best Local Similarity 96.4%; Pred. No. 60;  
 Matches 27; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 17 GCTGGAGGGGTGGTGGCCATTTTGG 44  
 Db 1 GCCTGGAGGGGTGGTGGCTATTTTGG 28

## RESULT 52

AA11044/c  
 ID AA11044 standard; DNA; 26 BP.  
 XX

AC AA11044;  
 XX  
 DT 02-JUL-1996 (first entry)  
 XX  
 DE Primer for production of telomerase antisense oligonucleotide.  
 XX  
 KW Telomerase; mammal; antisense; triplex forming oligonucleotide; plasmid;  
 KW probe; primer; ribozyme; ss.  
 XX  
 OS Synthetic.  
 XX  
 PN WO9601614-A2.  
 XX  
 PD 25-JAN-1996.  
 XX  
 PF 07-JUL-1995; 95WO-US008620.  
 XX  
 PR 07-JUL-1994; 94US-00272102.  
 PR 27-OCT-1994; 94US-00330123.  
 PR 13-FEB-1995; 95US-00387524.  
 PR 07-JUN-1995; 95US-00485778.  
 XX  
 PA (COLD-) COLD SPRING HARBOR LAB.  
 PA (GERO-) GERON CORP.  
 XX  
 PI Andrews WH, Avillion AA, Feng J, Funk W, Greider C, Marhuenda MA;  
 PI Villeponteau B;  
 XX  
 DR WPI; 1996-097428/10.  
 XX  
 PT RNA components of (non)human mammalian telomerase(s) - useful in studying  
 PT cell senescence and immortalisation.  
 XX  
 PS Example 8; Page 53; 85pp; English.  
 XX

XX The RNA components of (non) human mammalian telomerase(s) especially from  
 CC mouse, rat and chinese hamster are all claimed. Antisense  
 CC oligonucleotides can be used to block the activity of the telomerase;  
 CC probes and primers can be used in detection; vectors and host cells  
 CC transformed with the isolated telomerase genes can be used for production  
 CC of telomerase; RNA and DNA ribozymes and triplex forming  
 CC oligonucleotides directed against the telomerase genes can be used  
 CC therapeutically as can plasmids. A mouse which lacks the telomerase gene  
 CC (also claimed) can be used for study of telomere regulation in vivo, and  
 CC the role it plays in immortalisation. Three primers (AA11040, AA11043,  
 CC AA11044) were used to produce antisense oligonucleotides which were then  
 CC used to produce antisense expression plasmids. AA11040 was used  
 CC alongside both AA11043 and AA11044 to produce two different antisense  
 CC molecules  
 XX

SQ Sequence 26 BP; 7 A; 3 C; 9 G; 7 T; 0 U; 0 Other;  
 Query Match 5.8%; Score 26; DB 1; Length 26;  
 Best Local Similarity 100.0%; Pred. No. 59;  
 Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 145 CTTCCACCGTTCATTCTAGAGCAAC 170  
 Db 26 CTTCCACCGTTCATTCTAGAGCAAC 1

RESULT 53  
 AA110304/c  
 ID AA110304 standard; DNA; 26 BP.  
 XX  
 AC AA110304;  
 XX

DT 10-SEP-1996 (first entry)  
 XX  
 DE RNA component of human telomerase nested PCR primer R3c.  
 XX  
 KW RNA component; human; telomerase; polymerase chain reaction;  
 KW recombinant production; synthesis; mutant; detection; mammalian;

KW identification; modulating agent; neoplastic condition;  
 KW transcriptional regulatory sequence; gene therapy; disease; PCR primer;  
 KW ss.  
 XX  
 XX Synthetic.  
 XX WO9601835-A1.  
 XX  
 XX PD 25-JAN-1996.  
 XX  
 XX PF 06-JUL-1995; 95WO-US008530.  
 XX  
 XX PR 07-JUL-1994; 94US-00272102.  
 XX PR 27-OCT-1994; 94US-00330123.  
 XX PR 07-JUN-1995; 95US-00472802.  
 XX PR 07-JUN-1995; 95US-00482115.  
 XX  
 XX PA (GERO-) GERON CORP.  
 XX  
 XX PI Villeponteau B, Feng J, Funk W, Andrews WH;  
 XX WPI; 1996-097581/10.  
 XX  
 XX DR RNA component of mammalian telomerase, esp. human - useful in identifying  
 XX e.g. candidate telomerase-modulating agents.  
 XX  
 XX PS Example 10; Page 82; 114pp; English.  
 XX  
 XX CC The present sequence, a nested PCR primer for the RNA component of human  
 CC telomerase (RCHT), was used in a 5' RACE procedure. The RCHT can be used  
 CC in the recombinant prodn. of an active telomerase mol., capable of adding  
 CC sequences to chromosomal DNA telomeres, and in the synthesis of mutant  
 CC polynucleotides. The RCHT may also be used in the identification of  
 CC telomerase modulating agents, and in the detection of telomerase related,  
 CC or neoplastic conditions in a patient. Polynucleotides of at least 25  
 CC consecutive nucleotides identical, or complementary to the RCHT sequence  
 CC linked to heterologous transcriptional regulatory sequences, can be used  
 CC for the gene therapy of human diseases  
 XX  
 XX SQ Sequence 26 BP; 7 A; 3 C; 9 G; 7 T; 0 U; 0 Other;  
 XX  
 XX Query Match 5.8%; Score 26; DB 1; Length 26;  
 XX Best Local Similarity 100.0%; Pred. No. 59;  
 XX Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 XX  
 XX QY 145 CTTCCACCGTTCATTCTAGAGCAAAAC 170  
 XX ||||||||||||||||||||||||  
 XX Db 26 CTTCCACCGTTCATTCTAGAGCAAAAC 1  
 XX  
 XX RESULT 54  
 XX AAT10295/C  
 XX ID AAT10299 standard; DNA; 26 BP.  
 XX  
 XX AC AAT10299;  
 XX  
 XX DT 09-SEP-1996 (first entry)  
 XX  
 XX DE RNA component of human telomerase antisense plasmid PCR primer R3C.  
 XX  
 XX KW RNA component; human; telomerase; lung fibroblast; cell line WI-38;  
 KW recombinant production; synthesis; mutant; detection; mammalian;  
 KW identification; modulating agent; neoplastic condition;  
 KW transcriptional regulatory sequence; gene therapy; disease;  
 KW polymerase chain reaction; antisense plasmid; PCR primer; ss.  
 XX  
 XX OS Synthetic.  
 XX  
 XX PN WO9601835-A1.  
 XX  
 XX PD 25-JAN-1996.  
 XX

PF 06-JUL-1995; 95WO-US008530.  
 XX  
 XX PR 07-JUL-1994; 94US-00272102.  
 XX PR 27-OCT-1994; 94US-00330123.  
 XX PR 07-JUN-1995; 95US-00472802.  
 XX PR 07-JUN-1995; 95US-00482115.  
 XX  
 XX PA (GERO-) GERON CORP.  
 XX  
 XX PI Villeponteau B, Feng J, Funk W, Andrews WH;  
 XX WPI; 1996-097581/10.  
 XX  
 XX DR RNA component of mammalian telomerase, esp. human - useful in identifying  
 XX e.g. candidate telomerase-modulating agents.  
 XX  
 XX PS Example 8; Page 80; 114pp; English.  
 XX  
 XX CC The present sequence is a PCR primer for a RNA component of human  
 CC telomerase (RCHT), antisense plasmid. RCHT was derived from a genomic DNA  
 CC library obtd. from the human lung fibroblast cell line WI-38. The RCHT  
 CC can be used in the recombinant prodn. of an active telomerase mol.,  
 CC capable of adding sequences to chromosomal DNA telomeres, and in the  
 CC synthesis of mutant sequences for the detection of mutant mammalian  
 CC telomerase RNA component polynucleotides. The RCHT may also be used in  
 CC the identification of telomerase modulating agents, and in the detection  
 CC of telomerase related, or neoplastic conditions in a patient.  
 CC Polynucleotides of at least 25 consecutive nucleotides identical, or  
 CC complementary to the RCHT sequence linked to heterologous transcriptional  
 CC regulatory sequences, can be used for the gene therapy of human diseases  
 XX  
 XX SQ Sequence 26 BP; 7 A; 3 C; 9 G; 7 T; 0 U; 0 Other;  
 XX  
 XX Query Match 5.8%; Score 26; DB 1; Length 26;  
 XX Best Local Similarity 100.0%; Pred. No. 59;  
 XX Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 XX  
 XX QY 145 CTTCCACCGTTCATTCTAGAGCAAAAC 170  
 XX ||||||||||||||||||||||||  
 XX Db 26 CTTCCACCGTTCATTCTAGAGCAAAAC 1  
 XX  
 XX RESULT 55  
 XX AAT10306  
 XX ID AAT10306 standard; DNA; 26 BP.  
 XX  
 XX AC AAT10306;  
 XX  
 XX DT 10-SEP-1996 (first entry)  
 XX  
 XX DE RNA component of human telomerase PCR primer F3b.  
 XX  
 XX KW RNA component; human; telomerase; polymerase chain reaction;  
 KW recombinant production; synthesis; mutant; detection; mammalian;  
 KW identification; modulating agent; neoplastic condition;  
 KW transcriptional regulatory sequence; gene therapy; disease; PCR primer;  
 KW ss.  
 XX  
 XX OS Synthetic.  
 XX  
 XX PN WO9601835-A1.  
 XX  
 XX PD 25-JAN-1996.  
 XX  
 XX PF 06-JUL-1995; 95WO-US008530.  
 XX  
 XX PR 07-JUL-1994; 94US-00272102.  
 XX PR 27-OCT-1994; 94US-00330123.  
 XX PR 07-JUN-1995; 95US-00472802.  
 XX PR 07-JUN-1995; 95US-00482115.  
 XX  
 XX PA (GERO-) GERON CORP.  
 XX  
 XX PD

PI Villeponteau B, Feng J, Funk W, Andrews WH;  
XX WPI; 1996-097581/10.  
XX RNA component of mammalian telomerase, esp. human - useful in identifying  
PT e.g. candidate telomerase-modulating agents.  
XX Example 10; Page 83; 114pp; English.  
XX The present sequence, a PCR primer for the RNA component of human  
CC telomerase (RCHT), was used in a 3' RACE procedure. The RCHT can be used  
CC in the recombinant prodn. of an active telomerase mol., capable of adding  
CC sequences to chromosomal DNA telomeres, and in the synthesis of mutant  
CC sequences for the detection of mutant mammalian telomerase RNA component  
CC polynucleotides. The RCHT may also be used in the identification of  
CC telomerase modulating agents, and in the detection of telomerase related,  
CC or neoplastic conditions in a patient. Polynucleotides of at least 25  
CC consecutive nucleotides identical, or complementary to the RCHT sequence  
CC linked to heterologous transcriptional regulatory sequences, can be used  
CC for the gene therapy of human diseases  
XX  
XX Sequence 26 BP; 8 A; 6 C; 7 G; 5 T; 0 U; 0 Other;  
SQ  
Query Match 5.8%; Score 26; DB 1; Length 26;  
Best Local Similarity 100.0%; Pred. No. 59;  
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 45 TCTAACCTAACTGAGAGGCGTAG 70  
Db 1 TCTAACCTAACTGAGAGGCGTAG 26  
RESULT 56  
AAV58811/c  
ID AAT58811 standard; DNA; 26 BP.  
AC AAT58811;  
XX  
XX 20-NOV-1997 (first entry)  
XX Human telomerase PCR 3'-primer R3C.  
XX Cancer; eukaryotic parasite; hTR; vertebrate telomerase; yeast; protozoa;  
KW tumour; antibody; polymerase chain reaction; ss.  
XX Synthetic.  
XX WO9640868-A1.  
XX 19-DEC-1996.  
XX 06-JUN-1996; 96WO-US009517.  
XX 07-JUN-1995; 95US-00478352.  
XX (COLD-) COLD SPRING HARBOR LAB.  
XX Greider C, Autexier C;  
XX WPI; 1997-099928/09.  
XX DNA encoding essential RNA components of human telomerase - also  
PT truncated or recombinant telomerase, useful for diagnosis and treatment  
PT of cancer and infection by eukaryotic parasites.  
XX Example 5; Page 32; 48pp; English.  
XX The present sequence represents PCR 3'-primer R3C used for amplifying the  
CC human telomerase (hTR). The RNA and DNA can be used in hybridisation  
CC assays to detect or quantify telomerase activity in cells, tissue or  
CC fluid samples, e.g. for diagnosis of eukaryotic parasites (yeast and  
CC protozoa) or tumours. It is also useful as primers for amplification  
CC assays. The truncated or recombinant vertebrate telomerase is used

CC therapeutically to increase telomerase activity (also as reagents in the  
CC screening assay) while the RNA or other inhibitors such as antisense  
CC molecules, are used to reduce such activity. Typical applications are  
CC initiation/restoration of activity to cause senescence or to prevent  
CC immortalisation of cells in tumours or parasites. The DNA is also used to  
CC produce recombinant telomerase, which can then be used conventionally to  
CC raise antibodies for diagnostic detection of telomerase. Detecting  
CC telomerase allows early diagnosis of tumour or infection, before clinical  
CC signs manifest. Telomerase inhibitors directed against e.g. Trypanosoma  
CC should cause fewer side effects than drugs currently used to treat such  
CC infections. The DNA encodes those parts of hTR RNA essential for activity  
CC but are significantly shorter than the endogenous RNA component  
XX  
SQ Sequence 26 BP; 7 A; 3 C; 9 G; 7 T; 0 U; 0 Other;  
Query Match 5.8%; Score 26; DB 1; Length 26;  
Best Local Similarity 100.0%; Pred. No. 59;  
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 145 CTTCACCGTTTCATTCCTAGAGCAAAAC 170  
Db 26 CTTCACCGTTTCATTCCTAGAGCAAAAC 1  
RESULT 57  
AAV41192  
ID AAV41192 standard; DNA; 26 BP.  
XX AAV41192;  
AC AAV41192;  
XX  
XX 08-OCT-1998 (first entry)  
XX RNA component of human telomerase (hTR) amplifying forward primer.  
DE RNA component of human telomerase (hTR) amplifying forward primer.  
XX RNA component; human telomerase; antisense oligonucleotide; infection;  
KW neuroblastoma; bladder cancer; colon cancer; prostate cancer; cancer;  
KW contraception; sterilisation; immunosuppression; therapeutic; hTR;  
KW immune system down-regulation; anti-inflammatory therapy; RT-PCR; primer;  
KW ss.  
XX Synthetic.  
OS Homo sapiens.  
OS  
XX WO9828442-A1.  
XX 02-JUL-1998.  
XX 19-DEC-1997; 97WO-US023619.  
XX 20-DEC-1996; 96US-00770564.  
PR 20-DEC-1996; 96US-00770565.  
XX (GERO-) GERON CORP.  
PA  
XX Kim NW, Wu F, Kealey JT, Pruzan R, Weinrich SL;  
PI WPI; 1998-377670/32.  
XX New polynucleotide(s) anti-sense to human telomerase - used for detecting  
PT or inhibiting human telomerase, e.g. for treating cancers, contraception,  
PT immuno-suppression or treating infection.  
XX Claim 65; Page 75; 80pp; English.  
XX This primer is used for the RT-PCR amplification of an RNA component of  
CC human telomerase (hTR). This is used in the method of invention of  
CC determining the amount of hTR in a sample. The method comprises  
CC amplifying a sequence of hTR and a control polynucleotide from a sample  
CC and determining an amount of amplified hTR and an amount of amplified  
CC control polynucleotide. The amount of amplified hTR is normalised with  
CC respect to the amount of amplified control polynucleotide to provide a  
CC normalised amount of hTR which provides a determination of the amount of  
CC hTR in the sample. The invention provides antisense oligonucleotides to

CC the hTR which may specifically be used for detection of an RNA component  
CC of human telomerase in a sample. This is useful for diagnosing cancer  
CC (especially neuroblastoma, bladder, colon and prostate cancer), and  
CC providing prognosis for a cancer patient. The antisense oligonucleotides  
CC can be used for inhibiting telomerase activity in both cultured cells and  
CC in cells in vivo. They can be used in therapeutics for treating or  
CC preventing cancer, for contraception or sterilisation, for  
CC immunosuppression, and for selectively down-regulating specific branches  
CC of the immune system, e.g. a specific subset of T-cells, in anti-  
CC inflammatory therapies or for treating infections by, e.g. yeast,  
CC parasites or fungi  
XX  
SQ Sequence 26 BP; 3 A; 6 C; 11 G; 6 T; 0 U; 0 Other;

Query Match 5.8%; Score 26; DB 1; Length 26;  
Best Local Similarity 100.0%; Pred. No. 59;  
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 60 GAAGGGCGTAGGCCGCGTCTTTGC 85  
|||||  
Db 1 GAAGGGCGTAGGCCGCGTCTTTGC 26

RESULT 58  
AAV17033/C

ID AAV17033 standard; DNA; 26 BP.

XX  
AC AAV17033;

XX  
DT 13-AUG-1998 (first entry)

XX  
DE Telomerase PCR primer R3c.

XX Human; telomerase reverse transcriptase; hTERT; TRT; diagnosis; prognosis;  
XX cell proliferation; cancer; ageing; ribonucleoprotein; PCR primer; ss.

XX Synthetic.

XX OS Homo sapiens.

XX GB2317891-A.

XX 08-APR-1998.

XX 01-OCT-1997; 97GB-00020890.

XX 01-OCT-1996; 96US-00724643.

XX 18-APR-1997; 97US-00844419.

XX 25-APR-1997; 97US-00846017.

XX 06-MAY-1997; 97US-00851843.

XX 09-MAY-1997; 97US-00854050.

XX 14-AUG-1997; 97US-00911312.

XX 14-AUG-1997; 97US-00912951.

XX (GERO-) GERON CORP.

XX (UYTE-) UNIV TECHNOLOGY CORP.

XX Cech TR, Lingner J, Nakamura T, Chapman KB, Morin GB, Harley CB;

XX Andrews WH;

XX WPI; 1998-171633/16.

XX Pure and recombinant human Telomerase Reverse Transcriptase and its

XX variants - are useful in the diagnosis, prognosis and treatment of cell

XX proliferation conditions especially cancer and ageing.

XX Example 2; Page 218; 387pp; English.

XX The present sequence represents a PCR primer from the present invention

XX which describes human telomerase reverse transcriptase (hTERT). The

CC compound; (B) preparation of recombinant telomerase by contacting a  
CC protein preparation of hTERT with a telomerase RNA component; (C)  
CC detection of the hTERT RNA or protein in a sample by binding a relevant  
CC probe to the sample and detecting the complex formed or in the case of  
CC RNA detection, amplifying the product and correlating the presence of  
CC complex or amplification product with presence of hTERT in the sample; and  
CC (D) increasing the proliferation of a vertebrate cell by increasing hTERT  
CC expression; and (E) the use of an agent that causes an increase in cell  
CC vertebrate cell proliferation to create a medicament that inhibits  
CC ageing. A protein preparation of hTERT and the polynucleotide encoding  
CC hTERT can be used in the manufacture of medicaments for inhibiting the  
CC effect of ageing or cancer. Inhibitors of telomerase activity can be used  
CC to treat conditions that are associated with high telomerase activity. A  
CC protein preparation of hTERT can also be used in the new methods  
XX  
SQ Sequence 26 BP; 7 A; 3 C; 9 G; 7 T; 0 U; 0 Other;

Query Match 5.8%; Score 26; DB 1; Length 26;

Best Local Similarity 100.0%; Pred. No. 59;

Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 145 CTTCCACCGTTCATTTCTAGAGCAAAC 170

|||||  
Db 26 CTTCCACCGTTCATTTCTAGAGCAAAC 1

RESULT 59

AAV17032

ID AAV17032 standard; DNA; 26 BP.

XX  
AC AAV17032;

XX  
DT 13-AUG-1998 (first entry)

XX Telomerase PCR primer F3b.

XX Human; telomerase reverse transcriptase; hTERT; TRT; diagnosis; prognosis;  
XX cell proliferation; cancer; ageing; ribonucleoprotein; PCR primer; ss.

XX Synthetic.

XX OS Homo sapiens.

XX GB2317891-A.

XX 08-APR-1998.

XX 01-OCT-1997; 97GB-00020890.

XX 01-OCT-1996; 96US-00724643.

XX 18-APR-1997; 97US-00844419.

XX 25-APR-1997; 97US-00846017.

XX 06-MAY-1997; 97US-00851843.

XX 09-MAY-1997; 97US-00854050.

XX 14-AUG-1997; 97US-00911312.

XX 14-AUG-1997; 97US-00912951.

XX 14-AUG-1997; 97US-00915503.

XX (GERO-) GERON CORP.

XX (UYTE-) UNIV TECHNOLOGY CORP.

XX Cech TR, Lingner J, Nakamura T, Chapman KB, Morin GB, Harley CB;

XX Andrews WH;

XX WPI; 1998-171633/16.

XX Pure and recombinant human Telomerase Reverse Transcriptase and its

XX variants - are useful in the diagnosis, prognosis and treatment of cell

XX proliferation conditions especially cancer and ageing.

XX Example 2; Page 218; 387pp; English.

XX The present sequence represents a PCR primer from the present invention

XX which describes human telomerase reverse transcriptase (hTERT). The

Sequence 26 BP; 8 A; 6 C; 7 G; 5 T; 0 U; 0 Other;

XX DE Human telomerase RNA specific PCR primer-2.



XX PCR primer; human telomerase RNA; hTR; amplify; human stauferen cDNA;  
 KW htau; synthesised; random hexamer primer;  
 KW Superscript II reverse transcriptase; ss.  
 XX Synthetic.  
 OS Homo sapiens.  
 XX WO9951255-A1.  
 XX 14-OCT-1999.  
 XX 06-APR-1999; 99WO-US007533.  
 XX 06-APR-1998; 98US-0080783P.  
 XX (UWJO ) UNIV JOHNS HOPKINS SCHOOL MEDICINE.  
 XX Greider CW, Le S;  
 XX WPI; 1999-620168/53.  
 XX Human stauferen polypeptide useful in methods for identifying telomerase  
 PT inhibitors.  
 XX Disclosure; Page 15; 50pp; English.  
 XX The present sequence is a PCR primer specific to human telomerase RNA  
 CC (hTR). It is used to amplify human stauferen (htau) cDNA synthesised using  
 CC random hexamer primers and Superscript II reverse transcriptase  
 XX Sequence 26 BP; 7 A; 3 C; 9 G; 7 T; 0 U; 0 Other;  
 SQ

Query Match 5.8%; Score 26; DB 1; Length 26;  
 Best Local Similarity 100.0%; Pred. No. 59;  
 Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 145 CTTCCACCGTTCATCTAGAGCAAC 170  
 Db 26 CTTCCACCGTTCATCTAGAGCAAC 1

RESULT 63  
 AAZ08703  
 ID AAZ08703 standard; DNA; 26 BP.  
 AC AAZ08703;  
 XX 20-OCT-1999 (first entry)  
 DT Human telomerase RNA template PCR primer F3B.  
 DE Telomerase; body fluid; cancer; tumour; screening; TRAP; diagnosis;  
 KW telomeric repeat amplification protocol; detection; PCR primer; ss.  
 XX Synthetic.  
 OS Homo sapiens.  
 XX WO9941406-A1.  
 XX 19-AUG-1999.  
 XX 16-FEB-1999; 99WO-US003302.  
 XX 16-FEB-1998; 98US-0074793P.  
 XX (UYMA-) UNIV MARYLAND BALTIMORE.  
 XX Strovel JW, Stamberg J, Highsmith E, Abruzzo LV;  
 XX WPI; 1999-508655/42.  
 XX Detecting telomerase activity in non-cellular body fluid using a modified

PT telomeric repeat amplification protocol.  
 XX Disclosure; Page 16; 32pp; English.  
 XX A method has been developed for detecting telomerase activity in a non-  
 CC cellular portion of body fluid from a cancer patient using a modified  
 CC telomeric repeat amplification protocol (TRAP). A method for detecting  
 CC cancer comprises: (a) removing the cellular portion of a body fluid  
 CC specimen from the patient; (b) preparing a protein extract from the body  
 CC fluid remainder; (c) assaying the extract for the presence and quantity  
 CC of telomerase RNA or telomerase activity; and (d) comparing the results  
 CC with normal levels to determine the presence of cancer. The methods are  
 CC used in cancer diagnosis and prognosis, and also to monitor cancer  
 CC therapy effectiveness. Unlike prior art telomerase activity assays in  
 CC cancer patients, the method allows noninvasive sample collection. The  
 CC methods are also more reliable and less tumour specific than other  
 CC methods which detect circulating tumour markers. The present sequence  
 CC represents a human telomerase RNA template PCR primer used in the  
 CC exemplification of the present invention  
 XX Sequence 26 BP; 8 A; 6 C; 7 G; 5 T; 0 U; 0 Other;  
 SQ

Query Match 5.8%; Score 26; DB 1; Length 26;  
 Best Local Similarity 100.0%; Pred. No. 59;  
 Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 45 TCTAACCCCTAACTGAGAGGGCGTAG 70  
 Db 1 TCTAACCCCTAACTGAGAGGGCGTAG 26

RESULT 64  
 AAAX77401  
 ID AAAX77401 standard; DNA; 26 BP.  
 AC AAAX77401;  
 XX 05-AUG-1999 (first entry)  
 DT Human telomerase RNA PCR primer TE-hTR5.3.  
 DE Telomerase; human; diagnosis; bladder cancer; detection; urine;  
 KW PCR primer; ss.  
 XX Synthetic.  
 OS Homo sapiens.  
 XX EP926245-A2.  
 XX 30-JUN-1999.  
 XX 21-DEC-1998; 98EP-00124326.  
 XX 22-DEC-1997; 97DE-01057300.  
 XX (HOFF ) ROCHE DIAGNOSTICS GMBH.  
 PA Emrich T;  
 XX WPI; 1999-349242/30.  
 DR Detecting telomerase RNA in urine - useful for diagnosis of bladder  
 PT cancer.  
 XX Claim 6; Page 10; 13pp; German.  
 XX This invention describes a novel method for diagnosing bladder cancer,  
 CC which comprises detecting telomerase RNA in a urine sample. The method of  
 CC the invention has greater sensitivity and reliability than assays for  
 CC telomerase activity (cf. WO 9735871). This sequence represents a primer  
 CC used in the method of the invention  
 XX Sequence 26 BP; 6 A; 6 C; 11 G; 3 T; 0 U; 0 Other;  
 SQ

Query Match 5.8%; Score 26; DB 1; Length 26;  
Best Local Similarity 100.0%; Pred. No. 59;  
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 54 AACTGAGAAGGGCGTAGGCGCGGTGC 79  
| | | | | | | | | | | | | | | | | | | | | | | | | |  
Db 1 AACTGAGAAGGGCGTAGGCGCGGTGC 26

RESULT 65  
ID AAX77402/c  
AC AAX77402;  
XX 05-AUG-1999 (first entry)  
XX Human telomerase RNA PCR primer TE-hTR3.1.  
XX Telomerase; human; diagnosis; bladder cancer; detection; urine;  
KW PCR primer; ss.  
XX Synthetic.  
OS Homo sapiens.  
XX EP926245-A2.  
XX 30-JUN-1999.  
XX 21-DEC-1998; 98EP-00124326.  
XX 22-DEC-1997; 97DE-01057300.  
XX (HOFF ) ROCHE DIAGNOSTICS GMBH.  
XX Emrich T;  
XX WPI; 1999-349242/30.  
XX Detecting telomerase RNA in urine - useful for diagnosis of bladder cancer.  
XX Claim 6; Page 10; 13pp; German.  
XX This invention describes a novel method for diagnosing bladder cancer which comprises detecting telomerase RNA in a urine sample. The method of the invention has greater sensitivity and reliability than assays for telomerase activity (cf. WO 9735871). This sequence represents a primer used in the method of the invention  
XX Sequence 26 BP; 7 A; 3 C; 9 G; 7 T; 0 U; 0 Other;

Query Match 5.8%; Score 26; DB 1; Length 26;  
Best Local Similarity 100.0%; Pred. No. 59;  
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 145 CTTCCACCGTTTCATTCTAGACAAAC 170  
| | | | | | | | | | | | | | | | | | | | | | | | | |  
Db 26 CTTCCACCGTTTCATTCTAGACAAAC 1

RESULT 66  
ID AAX77131  
AC AAX77131;  
XX 03-AUG-1999 (first entry)  
XX PCR primer hTR S28.  
XX Cellular senescence; modulator; GC6 gene; senescent gene expression;

KW pGC6; human; PCR primer; ss.  
XX Synthetic.  
XX WO9925878-A2.  
XX 27-MAY-1999.  
XX PF 19-NOV-1998; 98WO-US024996.  
XX PR 19-NOV-1997; 97US-00974180.  
XX (GERO-) GERON CORP.  
XX Funk W;  
XX WPI; 1999-347496/29.  
XX New human GC6 gene, useful for identifying agents for treating diseases and/or conditions associated with cell senescence.  
XX Example 5; Page 74; 79pp; English.  
XX The invention relates to methods for modulating and identifying cellular senescence. Recombinant expression vectors comprising a recombinant polynucleotide corresponding to a polynucleotide in a human GC6 gene, are useful for altering senescent gene expression. The vectors and host cells comprising the vectors are useful for identifying agents that prevent or modulate senescent gene expression. The polynucleotides are useful for producing the protein, pGC6 and nucleic acid derivatives. The proteins encoded are useful for raising antibodies specific for pGC6, which are useful for isolating pGC6, and for detecting cells comprising pGC6 in complex cell mixtures. The characterization of the polynucleotides enable the identification of therapeutic agents that identify and distinguish between young and senescent cells. This enables treatment of aging diseases induced or exacerbated by cellular senescence  
XX Sequence 26 BP; 1 A; 8 C; 9 G; 8 T; 0 U; 0 Other;

Query Match 5.8%; Score 26; DB 1; Length 26;  
Best Local Similarity 100.0%; Pred. No. 59;  
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 306 TTGGGCTCTGTGAGCGCGGCTCTCT 331  
| | | | | | | | | | | | | | | | | | | | | | | | | |  
Db 1 TTGGGCTCTGTGAGCGCGGCTCTCT 26

RESULT 67  
ID AAX01541  
AC AAX01541;  
XX 29-APR-1999 (first entry)  
XX PCR primer for Human TPC3 gene.  
XX TPC2; TPC3; human; telomere length regulation; cancer; pregnancy; fertility; diagnosis; therapy; PCR primer; ss.  
XX Synthetic.  
OS Homo sapiens.  
XX US5858777-A.  
XX 12-JAN-1999.  
XX 13-SEP-1996; 96US-00710249.  
XX 08-SEP-1995; 95US-0003492P.  
XX 05-JAN-1996; 96US-00583808.

PA (GERO-) GERON CORP.  
XX Adams RR, Andrews WH, Villeponteau B, Feng J;  
XX WPI; 1999-152104/13.  
XX DNA encoding proteins TPC2 and TPC3 - useful for regulating telomere  
PT length or modulating telomerase activity.  
XX Example; Col 38; 59pp; English.  
XX This sequence represents a PCR primer for DNA encoding the human TPC3  
CC protein, which is contained within the recombinant mammalian host cell of  
CC the invention. The invention provides methods and reagents for regulating  
CC telomere length and modulating telomerase activity in mammalian cells as  
CC well as for detecting, diagnosing, and treating related diseases and  
CC conditions such as cancer, pregnancy, or fertility in humans and other  
CC mammals  
XX Sequence 26 BP; 8 A; 6 C; 7 G; 5 T; 0 U; 0 Other;  
SQ  
Query Match 5.8%; Score 26; DB 1; Length 26;  
Best Local Similarity 100.0%; Pred. No. 59;  
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Qy 45 TCTAACCCCTAACTGAGGAGGCGTAG 70  
Db 1 TCTAACCCCTAACTGAGGAGGCGTAG 26  
RESULT 68  
AA01542/c  
ID AA01542 standard; DNA; 26 BP.  
XX  
AC AA01542;  
XX  
DT 29-APR-1999 (first entry)  
XX  
DE PCR primer for Human TPC3 gene.  
XX  
KW TPC3; human; telomere length regulation; cancer; pregnancy;  
KW fertility; diagnosis; therapy; PCR primer; ss.  
XX Synthetic.  
OS Homo sapiens.  
XX  
PN US858777-A.  
XX  
PD 12-JAN-1999.  
XX  
PF 13-SEP-1996; 96US-00710249.  
XX  
PR 08-SEP-1995; 95US-0003492P.  
PR 05-JAN-1996; 96US-00583608.  
XX  
PA (GERO-) GERON CORP.  
XX  
PI Adams RR, Andrews WH, Villeponteau B, Feng J;  
XX  
XX WPI; 1999-152104/13.  
XX  
PT DNA encoding proteins TPC2 and TPC3 - useful for regulating telomere  
PT length or modulating telomerase activity.  
XX  
PS Example; Col 38; 59pp; English.  
XX  
CC This sequence represents a PCR primer for DNA encoding the human TPC3  
CC protein, which is contained within the recombinant mammalian host cell of  
CC the invention. The invention provides methods and reagents for regulating  
CC telomere length and modulating telomerase activity in mammalian cells as  
CC well as for detecting, diagnosing, and treating related diseases and  
CC conditions such as cancer, pregnancy, or fertility in humans and other  
CC mammals

XX  
SQ Sequence 26 BP; 7 A; 3 C; 9 G; 7 T; 0 U; 0 Other;  
Query Match 5.8%; Score 26; DB 1; Length 26;  
Best Local Similarity 100.0%; Pred. No. 59;  
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Qy 145 CTTCACCGTTTCATTTCTAGAGCAAC 170  
Db 26 CTTCACCGTTTCATTTCTAGAGCAAC 1  
RESULT 69  
AAA88250/c  
ID AAA88250 standard; DNA; 26 BP.  
XX  
AC AAA88250;  
XX  
DT 15-DEC-2000 (first entry)  
XX  
DE Human telomerase RNA reverse transcriptase PCR primer #2.  
XX  
KW Human; telomerase; hTR; reverse transcriptase; RT-PCR; PCR primer;  
KW detection; cancer; micrometastasis; diagnosis; ss.  
XX Homo sapiens.  
OS  
XX WO2000046601-A1.  
PN  
XX 10-AUG-2000.  
PD  
XX 01-FEB-2000; 2000WO-IB000100.  
PF  
XX 02-FEB-1999; 99GB-00002302.  
PR  
XX (LARS/) LARSEN F.  
PA (SKAA/) SKAANSENG M.  
XX  
PI Larsen F, Skaanseng M;  
XX  
XX WPI; 2000-491281/43.  
DR  
XX Detecting telomerase activity in samples, useful for diagnosis of cancer  
PT and micrometastasis, comprises treating sample with solid phase, removing  
PT solid phase and treating to elute bound telomerase.  
XX  
PS Example 11; Page 38; 68pp; English.  
XX  
CC The present invention describes a method (I) for detecting telomerase  
CC activity in a sample. The method comprises treating the sample with a  
CC solid phase to bind telomerase, separating the solid phase from the  
CC sample to form a test sample which may be treated to elute bound  
CC telomerase and assaying the sample for telomerase activity. Also  
CC described are: (1) a kit (II) for detecting telomerase activity,  
CC comprising a solid phase and one or more components for assaying  
CC telomerase activity; and (2) a component (III) of an assay system for  
CC detecting telomerase activity, comprising a solid phase for binding  
CC telomerase on which is present a substrate for telomerase elongation. (I)  
CC is useful for cancer diagnosis or prognosis and detection of  
CC micrometastasis as detection of telomerase activity is indicative of  
CC cancer or micrometastasis. The solid phase used in (I) is useful for  
CC separating telomerase from a sample and therefore for detecting  
CC telomerase activity. (II) is useful for detection of cancer cells and may  
CC also comprises means for assaying an mRNA diagnostic for cancer. The  
CC present sequence represents a reverse transcriptase (RT) PCR primer for  
CC human telomerase RNA, which is used in an example from the present  
CC invention  
XX  
SQ Sequence 26 BP; 7 A; 3 C; 9 G; 7 T; 0 U; 0 Other;  
Query Match 5.8%; Score 26; DB 1; Length 26;  
Best Local Similarity 100.0%; Pred. No. 59;  
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy 145 CTTCCACCGTTTCATTCTAGAGCAAC 170
Db 26 CTTCCACCGTTTCATTCTAGAGCAAC 1

RESULT 70
AAA88249
ID AAA88249 standard; DNA; 26 BP.
XX AC AAA88249;
XX DT 15-DEC-2000 (first entry)
XX DE Human telomerase RNA reverse transcriptase PCR primer #1.
XX KW Human; telomerase; hTR; reverse transcriptase; RT-PCR; PCR primer;
XX KW detection; cancer; micrometastasis; diagnosis; ss.
XX OS Homo sapiens.
XX PN WO200046601-A1.
XX PD 10-AUG-2000.
XX PF 01-FEB-2000; 2000WO-IB000100.
XX PR 02-FEB-1999; 99GB-00002302.
XX PA (LARS/) LARSEN F.
XX PA (SKAA/) SKAANSSENG M.
XX PI Larsen F, Skaanseng M;
XX WI WPI; 2000-491281/43.
XX DR Detecting telomerase activity in samples, useful for diagnosis of cancer
XX PT and micrometastasis, comprises treating sample with solid phase, removing
XX PT solid phase and treating to elute bound telomerase.
XX PS Example 11; Page 38; 68pp; English.
XX CC The present invention describes a method (I) for detecting telomerase
XX CC activity in a sample. The method comprises treating the sample with a
XX CC solid phase to bind telomerase, separating the solid phase from the
XX CC sample to form a test sample which may be treated to elute bound
XX CC telomerase and assaying the sample for telomerase activity. Also
XX CC described are: (1) a kit (II) for detecting telomerase activity,
XX CC comprising a solid phase and one or more components for assaying
XX CC telomerase activity; and (2) a component (III) of an assay system for
XX CC detecting telomerase activity, comprising a solid phase for binding
XX CC telomerase on which is present a substrate for telomerase elongation. (I)
XX CC is useful for cancer diagnosis or prognosis and detection of
XX CC micrometastasis as detection of telomerase activity is indicative of
XX CC cancer or micrometastasis. The solid phase used in (I) is useful for
XX CC separating telomerase from a sample and therefore for detecting
XX CC telomerase activity. (II) is useful for detection of cancer cells and may
XX CC also comprise means for assaying an mRNA diagnostic for cancer. The
XX CC present sequence represents a reverse transcriptase (RT) PCR primer for
XX CC human telomerase RNA, which is used in an example from the present
XX CC invention
XX SQ Sequence 26 BP; 8 A; 6 C; 7 G; 5 T; 0 U; 0 Other;

Query Match 5.8%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 59;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 45 TCTAACCCCTTAAGAGAGGGCGTAG 70
Db 1 TCTAACCCCTTAAGAGAGGGCGTAG 26
```

CC The method allows the development and application of telomerase-specific  
 CC therapy even when only premalignant tumours, early cancer, or occult  
 CC cancer or metastasis such as following resection or in minimal residual  
 CC disease are present. The present sequence represents a PCR primer for  
 CC human telomerase-associated RNA template (hTR)  
 XX  
 SQ Sequence 26 BP; 7 A; 3 C; 9 G; 7 T; 0 U; 0 Other;  
 Query Match 5.8%; Score 26; DB 1; Length 26;  
 Best Local Similarity 100.0%; Pred. No. 59;  
 Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Qy 145 CTTCCACCGTTCATCTAGAGCAAC 170  
 Db 26 CTTCCACCGTTCATCTAGAGCAAC 1  
 RESULT 72  
 ABK48023  
 ID ABK48023 standard; DNA; 26 BP.  
 XX  
 AC ABK48023;  
 XX  
 DT 18-JUN-2002 (first entry)  
 XX  
 DE Human telomerase-associated RNA template (hTR), PCR primer hTRI.  
 XX  
 KW Human; telomerase-associated RNA template; hTR; endometrial; malignancy;  
 KW cancer; breast; ovarian; head and neck; lung; cervical; colorectal;  
 KW gastric; liver; pancreatic; bladder; prostate; brain; kidney; oesophagus;  
 KW melanoma; sarcoma; premalignancy; carcinoma in-situ; cervical dysplasia;  
 KW bronchial dysplasia; cervical intraepithelial neoplasia;  
 KW atypical hyperplasia; colorectal adenoma;  
 KW atypical endometrial hyperplasia; tumour; Barrett's oesophagus;  
 KW telomerase-directed therapy; primer; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 AC WO200218652-A2.  
 XX  
 DT 07-MAR-2002.  
 XX  
 DE 28-AUG-2001; 2001WO-US026749.  
 XX  
 DE 31-AUG-2000; 2000US-00653573.  
 XX  
 PA (ONCO-) ONCOMEDX INC.  
 XX  
 PI Kopreski MS, Gocke CD;  
 XX  
 DR WPI; 2002-269532/31.  
 XX  
 DE Detecting human telomerase RNA template RNA or human telomerase reverse  
 PT transcriptase protein RNA in bodily fluid, useful as marker for  
 PT diagnosing, monitoring or treating cancer, carcinoma in situ or  
 PT premalignancy.  
 XX  
 PS Example 1; Page 14; 30pp; English.  
 XX  
 CC The invention relates to detecting human telomerase RNA template (hTR)  
 CC RNA or human telomerase reverse transcriptase protein RNA (hTRT) RNA (I)  
 CC in a bodily fluid, comprising amplifying RNA extracted from plasma or  
 CC serum sample, or its corresponding cDNA comprising (I), using primers or  
 CC probes that target (I) or cDNA and detecting qualitatively or  
 CC quantitatively amplified product of (I) or cDNA product. The method is  
 CC useful for detecting (I) in a bodily fluid, which is useful for  
 CC identifying a human having (I) expressing cells or tissue which include a  
 CC malignancy preferably a cancer of breast, ovarian, head and neck, lung,  
 CC cervical, colorectal, gastric, liver, pancreatic, bladder, prostate,  
 CC endometrial, brain, kidney, or oesophagus, or a melanoma or sarcoma,  
 CC premalignancy or carcinoma in-situ, preferably cervical dysplasia,  
 CC cervical intraepithelial neoplasia, bronchial dysplasia, atypical  
 CC hyperplasia of the breast, ductal carcinoma in-situ, colorectal adenoma,

CC atypical endometrial hyperplasia, or Barrett's oesophagus, where the  
 CC human is at risk for developing a malignancy or premalignancy or is known  
 CC to have malignancy, premalignancy or carcinoma in situ. The method is  
 CC also useful for treating a human with cancer for telomerase-directed  
 CC therapy, which comprises selecting the human for the therapy after  
 CC detection of (I), for determining a need for diagnostic test in a human  
 CC with malignancy or premalignancy and for monitoring a therapy  
 CC administered to a human. (I) provides a marker which is utilised as a  
 CC guide to whether adequate therapeutic effect has been achieved, or  
 CC whether additional or more advanced therapy is required, and to assess  
 CC prognosis in these patients. The method also allows identification or  
 CC analysis, either quantitatively or qualitatively, of (I) in plasma or  
 CC serum of humans during or following surgical procedures to remove  
 CC premalignant or malignant lesions, and thus allow stratification of such  
 CC patients as to their risk of residual cancer following surgery, and their  
 CC need for further therapy or who has completed therapy as an early  
 CC indicator or relapsed cancer, impending relapse, or treatment failure.  
 CC The method allows the development and application of telomerase-specific  
 CC therapy even when only premalignant tumours, early cancer, or occult  
 CC cancer or metastasis such as following resection or in minimal residual  
 CC disease are present. The present sequence represents a PCR primer for  
 CC human telomerase-associated RNA template (hTR)  
 XX  
 SQ Sequence 26 BP; 8 A; 6 C; 7 G; 5 T; 0 U; 0 Other;  
 Query Match 5.8%; Score 26; DB 1; Length 26;  
 Best Local Similarity 100.0%; Pred. No. 59;  
 Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Qy 45 TCTAACCTTAACCTAGAGGGCGTAG 70  
 Db 1 TCTAACCTTAACCTAGAGGGCGTAG 26  
 RESULT 73  
 AAD24246/c  
 ID AAD24246 standard; DNA; 26 BP.  
 XX  
 AC AAD24246;  
 XX  
 DT 07-MAR-2002 (first entry)  
 XX  
 DE Human telomerase (hTR) cDNA amplifying R3c downstream RT-PCR primer.  
 XX  
 KW Human; telomerase; TR; telomerase activity-related disease; therapy;  
 KW cancer; pregnancy; fertility; RT-PCR primer; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN US6300110-B1.  
 XX  
 PD 09-OCT-2001.  
 XX  
 PF 23-DEC-1998; 98US-00220157.  
 XX  
 PR 09-SEP-1995; 95US-0003492P.  
 PR 05-JAN-1996; 96US-00583808.  
 PR 13-SEP-1996; 96US-00710249.  
 XX  
 PA (GERO-) GERON CORP.  
 XX  
 PI Villeponteau B, Feng J, Andrews WH, Adams RR;  
 XX  
 DR WPI; 2002-033174/04.  
 XX  
 CC Peptide products of the human TPC2 and TPC3 gene are involved in  
 CC regulation of telomere length and activity are useful to diagnose and  
 CC treat telomere length and activity-related diseases.  
 XX  
 PS Example; Col 38; 60pp; English.  
 XX  
 CC The invention relates to methods and reagents for regulating telomere  
 CC length and for modulating telomerase activity in mammalian cells. The

CC invention also relates to purified, synthetic or recombinant peptides  
CC such as TPC2 or TPC3 used for detecting regulators of telomere length and  
CC telomerase activity in mammalian cells and for a variety of related  
CC diagnostic and therapeutic purposes. The method is useful for screening,  
CC diagnosing, monitoring and treating diseases and other conditions such as  
CC cancer, pregnancy, fertility, telomere length and telomerase-activity.  
CC The present sequence is a reverse transcription (RT) PCR primer used for  
CC amplifying human telomerase (hTR) cDNA  
XX  
SQ Sequence 26 BP; 7 A; 3 C; 9 G; 7 T; 0 U; 0 Other;

Query Match 5.8%; Score 26; DB 1; Length 26;  
Best Local Similarity 100.0%; Pred. No. 59;  
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 145 CTTCCACCGTTCATTCTAGAGCAAC 170  
Db 26 CTTCCACCGTTCATTCTAGAGCAAC 1

RESULT 74  
AAD24245  
ID AAD24245 standard; DNA; 26 BP.  
XX  
AC AAD24245;  
XX  
DT 07-MAR-2002 (first entry)  
XX

DE Human telomerase (hTR) cDNA amplifying F3b upstream RT-PCR primer.  
XX Human; telomerase; TR; telomerase activity-related disease; therapy;  
KW cancer; pregnancy; fertility; RT-PCR primer; ss.  
XX Homo sapiens.  
OS  
XX US6300110-B1.  
PN  
XX  
PD 09-OCT-2001.  
XX  
PF 23-DEC-1998; 98US-00220157.  
XX  
PR 09-SEP-1995; 95US-0003492P.  
PR 05-JAN-1996; 96US-00583808.  
PR 13-SEP-1996; 96US-00710249.  
XX  
PA (GERO-) GERON CORP.  
XX  
PI Villeponteau B, Feng J, Andrews WH, Adams RR;  
XX WPI; 2002-033174/04.  
XX

XX Peptide products of the human TPC2 and TPC3 gene are involved in  
PT regulation of telomere length and activity are useful to diagnose and  
PT treat telomere length and activity-related diseases.  
XX  
PS Example; Col 38; 60pp; English.  
XX  
CC The invention relates to methods and reagents for regulating telomere  
CC length and for modulating telomerase activity in mammalian cells. The  
CC invention also relates to purified, synthetic or recombinant peptides  
CC such as TPC2 or TPC3 used for detecting regulators of telomere length and  
CC telomerase activity in mammalian cells and for a variety of related  
CC diagnostic and therapeutic purposes. The method is useful for screening,  
CC diagnosing, monitoring and treating diseases and other conditions such as  
CC cancer, pregnancy, fertility, telomere length and telomerase-activity.  
CC The present sequence is a reverse transcription (RT) PCR primer used for  
CC amplifying human telomerase (hTR) cDNA  
XX  
SQ Sequence 26 BP; 8 A; 6 C; 7 G; 5 T; 0 U; 0 Other;

Query Match 5.8%; Score 26; DB 1; Length 26;  
Best Local Similarity 100.0%; Pred. No. 59;  
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 45 TCTAACCCCTAACTGAGAGGGCGTAG 70  
Db 1 TCTAACCCCTAACTGAGAGGGCGTAG 26

RESULT 75  
ABA95496  
ID ABA95496 standard; DNA; 26 BP.  
XX  
AC ABA95496;  
XX

DT 12-MAR-2002 (first entry)  
XX  
DE Human telomerase RNA, hTR, sense PCR primer.  
XX  
KW Human; telomerase RNA; PCR primer; cancer; breast; ovarian; stomach;  
KW colon; hTR; ss.  
XX  
OS Homo sapiens.  
XX  
PN EP1158055-A1.  
XX  
PD 28-NOV-2001.  
XX  
PF 26-MAY-2000; 2000EP-00111370.  
XX  
PR 26-MAY-2000; 2000EP-00111370.  
XX

PA (CHEN/) CHEN X Q.  
PA (STRO/) STROUN M.  
PA (ANKE/) ANKER P.  
XX  
PI Chen XQ, Stroun M, Anker P;  
XX WPI; 2002-099090/14.  
XX

XX Accurate, reliable diagnosis and/or prognosis of cancer, e.g. breast  
PT cancer, by analyzing the RNA components of telomerase in plasma or serum.  
XX  
PS Example; Col 3; 6pp; French.  
XX  
CC The present invention relates to a method for diagnosing and/or  
CC monitoring the evolution of cancers. The method comprises analysing  
CC enzyme telomerase RNA in blood plasma or serum. The method is typically  
CC used for diagnosing breast, ovarian, stomach or colon cancer and/or  
CC monitoring the evolution of the cancers after treatment by chemotherapy  
CC or operations. The present sequence is a PCR primer for human telomerase  
CC RNA (hTR), which was used in the example from the present invention  
XX  
SQ Sequence 26 BP; 3 A; 6 C; 11 G; 6 T; 0 U; 0 Other;

Query Match 5.8%; Score 26; DB 1; Length 26;  
Best Local Similarity 100.0%; Pred. No. 59;  
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 60 GAAGGGCGTAGGCGCGTGTCTTTGC 85  
Db 1 GAAGGGCGTAGGCGCGTGTCTTTGC 26

RESULT 76  
ADG82593/c  
ID ADG82593 standard; DNA; 26 BP.  
XX  
AC ADG82593;  
XX

DT 11-MAR-2004 (first entry)  
XX  
DE Human telomerase gene, hTR, RT-PCR primer #2.  
XX  
KW Human; ss; PCR; telomerase; cancer; pregnancy; fertility; neoplasm; hTR;  
KW RT-PCR; reverse transcriptase PCR; primer.

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XX OS Homo sapiens.
XX PN US2003207404-A1.
XX PD 06-NOV-2003.
XX PF 29-JUN-2001; 2001US-00895606.
XX PR 09-SEP-1995; 95US-0003492P.
XX PR 05-JAN-1996; 96US-00583808.
XX PR 13-SEP-1996; 96US-00710249.
XX PR 23-DEC-1998; 98US-00220157.
XX PA (VILL/) VILLEPONTEAU B.
XX PA (FENG/) FENG J.
XX PA (ANDR/) ANDREWS W H.
XX PA (ADAM/) ADAMS R R.
XX PI Villeponteau B, Feng J, Andrews WH, Adams RR;
XX DR WPI; 2004-051519/05.
XX PT Novel monoclonal or isolated polyclonal antibody that specifically binds
XX PT human TPC2 or TPC3. useful for treating neoplasia.
XX PS Example D; SEQ ID NO 26; 62pp; English.
XX CC The invention relates to a monoclonal or isolated polyclonal antibody
XX CC specifically binds human TPC2 or TPC3 (not defined, appearing as ADG82569
XX CC and ADG82571). Also included are an antibody obtained by collecting
XX CC antiserum from a subject immunised with a peptide comprising at least 10
XX CC contiguous amino acids of TPC-2 or TPC-3, a host cell secreting the
XX CC antibody, a composition for obtaining a TPC2-specific antibody comprising
XX CC at least 10 contiguous amino acids ADG82569, a composition for obtaining
XX CC a TPC3-specific antibody, comprising at least 10 contiguous amino acids
XX CC of ADG82571, an isolated, recombinant or synthetic nucleic acid encoding
XX CC a peptide immunogenic for TPC2-specific antibody or TPC3-antibody and a
XX CC host cell containing the nucleic acid. The antibody is useful for
XX CC determining a condition in a subject associated with a high level of TPC2
XX CC or TPC3, and is useful for screening, diagnosing and monitoring
XX CC conditions such as cancer, pregnancy or fertility. The antibody is also
XX CC useful for treating conditions associated with inappropriate expression
XX CC of TPC2 or TPC3 such as neoplasia. The present sequence is a reverse
XX CC transcriptase (RT)-PCR primer used to analyse the expression profile of
XX CC the human telomerase gene, which is co-expressed with TPC-2 and TPC-3.
XX SQ Sequence 26 BP; 7 A; 3 C; 9 G; 7 T; 0 U; 0 Other;

Query Match 5.8%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 59;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 145 CTTCCACCGTTCATCTAGACAAAC 170
Db 26 CTTCCACCGTTCATCTAGACAAAC 1

RESULT 77
ADG82592
ID ADG82592 standard; DNA; 26 BP.
XX AC
XX AC ADG82592;
XX DT 11-MAR-2004 (first entry)
XX DE Human telomerase gene, hTR, RT-PCR primer.
XX KW Human; ss; PCR; telomerase; cancer; pregnancy; fertility; neoplasm; hTR;
XX KW RT-PCR; reverse transcriptase PCR; primer.
XX OS Homo sapiens.
XX PN

Query Match 5.8%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 59;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 45 TCTAACCCCTAACTGAGAGGCGTAG 70
Db 1 TCTAACCCCTAACTGAGAGGCGTAG 26

RESULT 78
AAZ07280/c
ID AAZ07280 standard; DNA; 25 BP.
XX AC
XX AC AAZ07280;
XX DT 22-OCT-1999 (first entry)
XX DE Human telomerase RNA gene (hTR) specific primer TRC3R.
XX KW Telomerase RNA; TR; promoter; cytotoxin; cancer; neoplasia; hTR;
XX KW gene therapy; thymidine kinase gene; anticancer therapy; human;
XX KW PCR primer; ss.
XX OS Synthetic.
XX OS Homo sapiens.
XX PN WO9938964-A2.

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PN US2003207404-A1.
XX PD 06-NOV-2003.
XX PF 29-JUN-2001; 2001US-00895606.
XX PR 09-SEP-1995; 95US-0003492P.
XX PR 05-JAN-1996; 96US-00583808.
XX PR 13-SEP-1996; 96US-00710249.
XX PR 23-DEC-1998; 98US-00220157.
XX PA (VILL/) VILLEPONTEAU B.
XX PA (FENG/) FENG J.
XX PA (ANDR/) ANDREWS W H.
XX PA (ADAM/) ADAMS R R.
XX PI Villeponteau B, Feng J, Andrews WH, Adams RR;
XX DR WPI; 2004-051519/05.
XX PT Novel monoclonal or isolated polyclonal antibody that specifically binds
XX PT human TPC2 or TPC3. useful for treating neoplasia.
XX PS Example D; SEQ ID NO 25; 62pp; English.
XX CC The invention relates to a monoclonal or isolated polyclonal antibody
XX CC specifically binds human TPC2 or TPC3 (not defined, appearing as ADG82569
XX CC and ADG82571). Also included are an antibody obtained by collecting
XX CC antiserum from a subject immunised with a peptide comprising at least 10
XX CC contiguous amino acids of TPC-2 or TPC-3, a host cell secreting the
XX CC antibody, a composition for obtaining a TPC2-specific antibody comprising
XX CC at least 10 contiguous amino acids ADG82569, a composition for obtaining
XX CC a TPC3-specific antibody, comprising at least 10 contiguous amino acids
XX CC of ADG82571, an isolated, recombinant or synthetic nucleic acid encoding
XX CC a peptide immunogenic for TPC2-specific antibody or TPC3-antibody and a
XX CC host cell containing the nucleic acid. The antibody is useful for
XX CC determining a condition in a subject associated with a high level of TPC2
XX CC or TPC3, and is useful for screening, diagnosing and monitoring
XX CC conditions such as cancer, pregnancy or fertility. The antibody is also
XX CC useful for treating conditions associated with inappropriate expression
XX CC of TPC2 or TPC3 such as neoplasia. The present sequence is a reverse
XX CC transcriptase (RT)-PCR primer used to analyse the expression profile of
XX CC the human telomerase gene, which is co-expressed with TPC-2 and TPC-3.
XX SQ Sequence 26 BP; 8 A; 6 C; 7 G; 5 T; 0 U; 0 Other;

Query Match 5.8%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 59;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 45 TCTAACCCCTAACTGAGAGGCGTAG 70
Db 1 TCTAACCCCTAACTGAGAGGCGTAG 26

RESULT 78
AAZ07280/c
ID AAZ07280 standard; DNA; 25 BP.
XX AC
XX AC AAZ07280;
XX DT 22-OCT-1999 (first entry)
XX DE Human telomerase RNA gene (hTR) specific primer TRC3R.
XX KW Telomerase RNA; TR; promoter; cytotoxin; cancer; neoplasia; hTR;
XX KW gene therapy; thymidine kinase gene; anticancer therapy; human;
XX KW PCR primer; ss.
XX OS Synthetic.
XX OS Homo sapiens.
XX PN WO9938964-A2.

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OS Homo sapiens.  
 XX US294650-B1.  
 XX  
 XX  
 PD 25-SEP-2001.  
 XX  
 XX 08-JUL-1999; 99US-00349532.  
 XX  
 XX 09-APR-1996; 96US-00630019.  
 PR 09-APR-1997; 97US-00838545.  
 XX  
 XX (TEXA ) UNIV TEXAS SYSTEM.  
 XX  
 XX Shay JW, Wright WE, Piatyszek MA, Corey DR, Norton JC;  
 XX WPI; 2001-638024/73.  
 XX  
 XX New peptide nucleic acids that hybridizes to the RNA component of  
 PT mammalian telomerase, useful for treating or preventing cancer, or  
 PT inflammation, lymphoproliferative diseases, autoimmune disease, or  
 PT neurodegenerative diseases.  
 XX  
 XX Example 1; Col 29; 46pp; English.  
 PS  
 XX The present invention relates to peptide nucleic acids (PNAs), comprising  
 CC a sequence of 6-25 nucleobases, that inhibit telomerase activity in  
 CC mammalian cells by hybridizing to the RNA component of mammalian  
 CC telomerase. The PNAs are useful as probes to detect the RNA component of  
 CC mammalian telomerase and as inhibitors of telomerase activity, or to  
 CC detect and/or quantitate polynucleotide having the human telomerase RNA  
 CC component (hTR) sequence, as well as in forensic identification of  
 CC individuals, such as paternity testing or identification of criminal  
 CC suspects or unknown descendants based on the hTR gene RFLP pattern. The  
 CC PNA can be further used for treating or preventing cancer, inflammation,  
 CC lymphoproliferative diseases, autoimmune disease, or neurodegenerative  
 CC diseases. The PNAs in combination with other pharmaceuticals (such as  
 CC antineoplastic or cytostatic agents) can be used for treating neoplasia,  
 CC hyperplasia, human immunodeficiency virus (HIV) infections, acquired  
 CC immunodeficiency syndrome (AIDS) and associated pathologies, and other  
 CC diseases characterised by abnormal telomere metabolism or telomerase  
 CC activity. The present sequence representing hTR RNA strand #1 is used to  
 CC test the inhibition of telomerase activity by the PNAs of the present  
 CC invention  
 XX  
 XX Sequence 25 BP; 7 A; 5 C; 6 G; 0 T; 7 U; 0 Other;  
 SQ Query Match 5.5%; Score 25; DB 1; Length 25;  
 Best Local Similarity 72.0%; Pred. No. 68;  
 Matches 18; Conservative 7; Mismatches 0; Indels 0; Gaps 0;  
 Qy 41 TTTGCTAACCCCTAACTGAGAAGG 65  
 Db 1 UUUGUCUAAACCCUACUGAGAAGG 25  
 RESULT 81  
 AAC93100/c  
 ID AAC93100 standard; DNA; 25 BP.  
 XX  
 XX AAC93100;  
 AC  
 XX 23-MAR-2001 (first entry)  
 DT  
 XX Human telomerase PCR primer #1.  
 DE  
 XX Telomerase; cancer; telomere damage; PCR primer; ss.  
 KW  
 XX Homo sapiens.  
 OS  
 XX WO200074667-A2.  
 XX  
 XX 14-DEC-2000.  
 PD  
 XX

PF 05-JUN-2000; 2000WO-US015544.  
 XX  
 XX 04-JUN-1999; 99US-0137549P.  
 XX  
 XX (AUJL/) AU J L.  
 PA (WIEN/) WIENTJES G.  
 XX  
 XX Au JL, Wientjes G;  
 PI WPI; 2001-071022/08.  
 XX  
 XX Inhibiting or reducing growth of cell for treating cancer, comprising  
 PT administering telomere damage-inducing agent and telomerase inhibitory  
 PT agent to the cell.  
 XX  
 XX Example 7; Page 62; 97pp; English.  
 PS  
 XX The present invention provides a method for inhibiting or reducing the  
 CC growth of a cell which involves administering to the cell a telomere  
 CC damage inducing agent and a telomerase inhibitory agent. This can be used  
 CC in the treatment of aberrant cell growth, including cancers  
 XX  
 XX Sequence 25 BP; 4 A; 5 C; 4 G; 12 T; 0 U; 0 Other;  
 SQ Query Match 5.5%; Score 25; DB 1; Length 25;  
 Best Local Similarity 100.0%; Pred. No. 68;  
 Matches 25; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Qy 161 TAGACGAAACAAAAATGTCAGCTG 185  
 Db 25 TAGACGAAACAAAAATGTCAGCTG 1  
 RESULT 82  
 AAV41169/c  
 ID AAV41169 standard; DNA; 30 BP.  
 XX  
 XX AAV41169;  
 AC  
 XX 08-OCT-1998 (first entry)  
 DT  
 XX RNA component of human telomerase (hTR) antisense oligo 14.  
 DE  
 XX RNA component; human telomerase; antisense oligonucleotide; infection;  
 KW neuroblastoma; bladder cancer; colon cancer; prostate cancer; cancer;  
 KW contraception; sterilisation; immunosuppression; therapeutic; hTR;  
 KW immune system down-regulation; anti-inflammatory therapy; ss.  
 XX  
 XX Synthetic.  
 OS  
 XX Homo sapiens.  
 XX  
 XX WO9828442-A1.  
 PN  
 XX 02-JUL-1998.  
 PD  
 XX 19-DEC-1997; 97WO-US023619.  
 PF  
 XX 20-DEC-1996; 96US-00770564.  
 XX  
 XX 20-DEC-1996; 96US-00770565.  
 PR  
 XX (GERO-) GERON CORP.  
 XX  
 XX Kim NW, Wu F, Kealey JT, Pruzan R, Weinrich SL;  
 PI WPI; 1998-377670/32.  
 XX  
 XX New polynucleotide(s) anti:sense to human telomerase - used for detecting  
 PT or inhibiting human telomerase, e.g. for treating cancers, contraception,  
 PT immuno-suppression or treating infection.  
 XX  
 XX Claim 11; Page 65; 80pp; English.  
 PS  
 XX Sequences shown in AAV41169 to AAV41181 represent antisense  
 CC



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Qy 311 CTCGTCTAGCCGCGGGTCTCTCGG 334
Db 24 CTCGTCTAGCCGCGGGTCTCTCGG 1

RESULT 85
AAV68465/c
ID AAV68465 standard; DNA; 24 BP.
XX AC AAV68465;
XX DT 22-MAR-1999 (first entry)
XX DE Human telomerase RNA (hTR) amplifying RT-PCR primer.
XX KW Human; telomerase; hTR; activator-antisense complex; malignant; enzyme;
XX KW cleave; brain; tumour malignant glioma; breast tumour; renal cell cancer;
XX KW melanoma; prostate cancer; leukemia; polychemia vera; myeloma; sarcoma;
XX KW Hodgkin's lymphoma; Waldenstrom's macroglobulinemia; heavy chain disease;
XX KW carcinoma; chemotherapeutic; antisense; RT-PCR; primer; ss.
XX OS Synthetic.
XX OS Homo sapiens.
XX PN WO9847911-A1.
XX PD 29-OCT-1998.
XX PF 13-APR-1998; 98WO-US007397.
XX PR 21-APR-1997; 97US-0044507P.
XX PR 03-FEB-1998; 98US-00018125.
XX PA (CLEV-) CLEVELAND CLINIC FOUND.
XX PA (USSH ) US NAT INST OF HEALTH.
XX PI Silverman RH, Kondo S, Cowell JK, Li G, Torrence PF;
XX WPI; 1998-609972/51.
XX DR New RNase L activator-telomerase antisense complex - useful to inhibit
XX PT telomerase activity in telomerase-expressing malignancies.
XX PS Example; Page 41; 81pp; English.
XX CC Primers AAV68464-65 are used for the RT-PCR amplification of the RNA
XX CC component of human telomerase (hTR). The invention relates to an
XX CC activator-antisense complex that comprises: (a) an antisense
XX CC oligonucleotide, complementary to a 12-25 nucleotide portion of hTR, with
XX CC a hydroxyl moiety at the first end; and (b) a linker attached to the
XX CC first end, and (c) an activator of RNase L attached to the linker. The
XX CC activator-antisense complex may be used for inhibiting the growth of a
XX CC telomerase-expressing malignant cell or tumour. The complex is used to
XX CC specifically cleave the ribonucleotide portion of a telomerase enzyme.
XX CC The complex inhibits growth of telomerase expressing malignant cells from
XX CC brain tumour malignant glioma, breast tumour, renal cell cancer,
XX CC melanoma, and prostate cancer. Many other malignancies and related
XX CC disorders, may be treated including various acute and chronic leukemias,
XX CC polychemia vera, Hodgkin's and non-Hodgkin's lymphomas, multiple
XX CC myeloma, Waldenstrom's macroglobulinemia, heavy chain disease, and solid
XX CC tumours, including numerous sarcomas and carcinomas. The complex is
XX CC preferably administered in combination with a chemotherapeutic agent,
XX CC particularly either cisplatin, doxorubicin, mitomycin, daunorubicin,
XX CC bleomycin, actinomycin D, or neocarzinostatin
XX SQ Sequence 24 BP; 3 A; 6 C; 10 G; 5 T; 0 U; 0 Other;

Query Match 5.3%; Score 24; DB 1; Length 24;
Best Local Similarity 100.0%; Pred. No. 78;
Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 423 CGTGACCCAGGACTCGGCTCACA 446
Db 24 CGTGACCCAGGACTCGGCTCACA 1

RESULT 86
AAV68464
ID AAV68464 standard; DNA; 24 BP.
XX AC AAV68464;
XX DT 22-MAR-1999 (first entry)
XX DE Human telomerase RNA (hTR) amplifying RT-PCR primer.
XX KW Human; telomerase; hTR; activator-antisense complex; malignant; enzyme;
XX KW cleave; brain; tumour malignant glioma; breast tumour; renal cell cancer;
XX KW melanoma; prostate cancer; leukemia; polychemia vera; myeloma; sarcoma;
XX KW Hodgkin's lymphoma; Waldenstrom's macroglobulinemia; heavy chain disease;
XX KW carcinoma; chemotherapeutic; antisense; RT-PCR; primer; ss.
XX OS Synthetic.
XX OS Homo sapiens.
XX PN WO9847911-A1.
XX PD 29-OCT-1998.
XX PF 13-APR-1998; 98WO-US007397.
XX PR 21-APR-1997; 97US-0044507P.
XX PR 03-FEB-1998; 98US-00018125.
XX PA (CLEV-) CLEVELAND CLINIC FOUND.
XX PA (USSH ) US NAT INST OF HEALTH.
XX PI Silverman RH, Kondo S, Cowell JK, Li G, Torrence PF;
XX WPI; 1998-609972/51.
XX DR New RNase L activator-telomerase antisense complex - useful to inhibit
XX PT telomerase activity in telomerase-expressing malignancies.
XX PS Example; Page 41; 81pp; English.
XX CC Primers AAV68464-65 are used for the RT-PCR amplification of the RNA
XX CC component of human telomerase (hTR). The invention relates to an
XX CC activator-antisense complex that comprises: (a) an antisense
XX CC oligonucleotide, complementary to a 12-25 nucleotide portion of hTR, with
XX CC a hydroxyl moiety at the first end; and (b) a linker attached to the
XX CC first end, and (c) an activator of RNase L attached to the linker. The
XX CC activator-antisense complex may be used for inhibiting the growth of a
XX CC telomerase-expressing malignant cell or tumour. The complex is used to
XX CC specifically cleave the ribonucleotide portion of a telomerase enzyme.
XX CC The complex inhibits growth of telomerase expressing malignant cells from
XX CC brain tumour malignant glioma, breast tumour, renal cell cancer,
XX CC melanoma, and prostate cancer. Many other malignancies and related
XX CC disorders, may be treated including various acute and chronic leukemias,
XX CC polychemia vera, Hodgkin's and non-Hodgkin's lymphomas, multiple
XX CC myeloma, Waldenstrom's macroglobulinemia, heavy chain disease, and solid
XX CC tumours, including numerous sarcomas and carcinomas. The complex is
XX CC preferably administered in combination with a chemotherapeutic agent,
XX CC particularly either cisplatin, doxorubicin, mitomycin, daunorubicin,
XX CC bleomycin, actinomycin D, or neocarzinostatin
XX SQ Sequence 24 BP; 7 A; 5 C; 5 G; 7 T; 0 U; 0 Other;

Query Match 5.3%; Score 24; DB 1; Length 24;
Best Local Similarity 100.0%; Pred. No. 78;
Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 41 TTTGTCTTAACCCCTAAGGAGG 64
Db 1 TTTGTCTTAACCCCTAAGGAGG 24

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RESULT 91
AAS15445
ID AAS15445 standard; DNA; 24 BP.
XX AC AAS15445;
XX DT 14-FEB-2002 (first entry)
XX DE Oligonucleotide #1 used in melting temperature studies of PNAs.
XX KW Mammalian; paternity testing; human telomerase RNA component;
XX KW hTR gene RFLP pattern; cancer; inflammation; forensic;
XX KW lymphoproliferative disease; autoimmune disease; hyperplasia;
XX KW neurodegenerative disease; neoplasia; HIV; AIDS; cytostatic;
XX KW human immunodeficiency virus; acquired immunodeficiency syndrome;
XX KW telomere metabolism; anti-inflammatory; immunosuppressive; ss.
XX OS Homo sapiens.
XX OS Synthetic.
XX PN US6294650-B1.
XX PD 25-SEP-2001.
XX PF 08-JUL-1999; 99US-00349532.
XX PR 09-APR-1996; 96US-00630019.
XX PR 09-APR-1997; 97US-00838545.
XX PA (TEXA ) UNIV TEXAS SYSTEM.
XX PI Shay JW, Wright WE, Piatyszek MA, Corey DR, Norton JC;
XX WPI; 2001-638024/73.
XX DR
XX PT New peptide nucleic acids that hybridizes to the RNA component of
XX PT mammalian telomerase, useful for treating or preventing cancer,
XX PT inflammation, lymphoproliferative diseases, autoimmune disease, or
XX PT neurodegenerative diseases.
XX PS Example 2; Col 34; 46pp; English.
XX CC The present invention relates to peptide nucleic acids (PNAs), comprising
XX CC a sequence of 6-25 nucleobases, that inhibit telomerase activity in
XX CC mammalian cells by hybridising to the RNA component of mammalian
XX CC telomerase. The PNAs are useful as probes to detect the RNA component of
XX CC mammalian telomerase and as inhibitors of telomerase activity. or to
XX CC detect and/or quantitate polynucleotide having the human telomerase RNA
XX CC component (hTR) sequence, as well as in forensic identification of
XX CC individuals, such as paternity testing or identification of criminal
XX CC suspects or unknown descendants based on the hTR gene RFLP pattern. The
XX CC PNA can be further used for treating or preventing cancer, inflammation,
XX CC lymphoproliferative diseases, autoimmune disease, or neurodegenerative
XX CC diseases. The PNAs in combination with other pharmaceuticals (such as
XX CC antineoplastic or cytostatic agents) can be used for treating neoplasia,
XX CC hyperplasia, human immunodeficiency virus (HIV) infections, acquired
XX CC immunodeficiency syndrome (AIDS) and associated pathologies, and other
XX CC diseases characterised by abnormal telomere metabolism or telomerase
XX CC activity. The present sequence representing a DNA oligonucleotide is
XX CC complementary to some of the PNAs of the present invention, and is used
XX CC in melting temperature studies
XX SQ Sequence 24 BP; 7 A; 5 C; 5 G; 7 T; 0 U; 0 Other;
Query Match 5.3%; Score 24; DB 1; Length 24;
Best Local Similarity 100.0%; Pred. No. 78;
Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 41 TTGTCTTAACCTTAAGGAGG 64
| | | | | | | | | | | | | | | | | | | | |
Db 1 TTGTCTTAACCTTAAGGAGG 24
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RESULT 92
ADQ36831
ID ADQ36831 standard; DNA; 24 BP.
XX AC ADQ36831;
XX DT 26-AUG-2004 (first entry)
XX DE Primer of the invention #3.
XX DE
XX KW Adenovirus vector; cancer; anti-cancer; ps-hTERT-TK; suicide gene;
XX KW HSV-TK; human telomerase; hTERT promoter; bovine growth hormone; BGH;
XX KW Adenovirus clone; Ad-hT-TK; Cytostatic; ss.
XX OS Unidentified.
XX PN KR2004002322-A.
XX PD 07-JAN-2004.
XX PF 27-JUN-2002; 2002KR-00038076.
XX PR 27-JUN-2002; 2002KR-00038076.
XX PA (KIMY/) KIM Y T.
XX PA (SONG/) SONG J S.
XX PI Kim YT, Song JS;
XX DR WPI; 2004-363161/34.
XX PT New adenovirus vector comprising telomerase promoter, useful in the
XX PT treatment of cancer.
XX PS Disclosure; SEQ ID NO 3; lpp; Korean.
XX CC Provided are an Adenovirus vector with a telomerase promoter associated
XX CC with cancer occurrence and a method for using the same for anti-cancer
XX CC treatment. An Adenovirus expression vector ps-hTERT-TK is produced by
XX CC using an expression cassette consisting of suicide gene HSV-TK, as late
XX CC polyadenylation signal for human telomerase hTERT promoter and bovine
XX CC growth hormone(BGH). Adenovirus clone Ad-hT-TK(KCCM 10387) is used for
XX CC anti-cancer gene therapy. The present sequence represents a primer of the
XX CC invention.
XX SQ Sequence 24 BP; 7 A; 5 C; 5 G; 7 T; 0 U; 0 Other;
Query Match 5.3%; Score 24; DB 1; Length 24;
Best Local Similarity 100.0%; Pred. No. 78;
Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 41 TTGTCTTAACCTTAAGGAGG 64
| | | | | | | | | | | | | | | | | | | | |
Db 1 TTGTCTTAACCTTAAGGAGG 24
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RESULT 93
AAZ08704/c
ID AAZ08704 standard; DNA; 25 BP.
XX AC AAZ08704;
XX DT 20-OCT-1999 (first entry)
XX DE Human telomerase RNA template PCR primer R3C.
XX KW Telomerase; body fluid; cancer; tumour; screening; TRAP; diagnosis;
XX KW telomeric repeat amplification protocol; detection; PCR primer; ss.
XX OS Synthetic.
XX OS Homo sapiens.
XX PN WO9941406-A1.
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XX PD 19-AUG-1999.
XX PF 16-FEB-1999; 99WO-US003302.
XX PR 16-FEB-1998; 98US-0074793P.
XX PA (UYMA-) UNIV MARYLAND BALTIMORE.
XX PI Strovel JW, Stamberg J, Highemith E, Abruzzo LV;
XX DR WPI; 1999-508655/42.
XX PT Detecting telomerase activity in non-cellular body fluid using a modified
XX PF telomeric repeat amplification protocol.
XX PS Disclosure; Page 16; 32pp; English.
XX CC A method has been developed for detecting telomerase activity in a non-
XX CC cellular portion of body fluid from a cancer patient using a modified
XX CC telomeric repeat amplification protocol (TRAP). A method for detecting
XX CC cancer comprises: (a) removing the cellular portion of a body fluid
XX CC specimen from the patient; (b) preparing a protein extract from the body
XX CC fluid remainder; (c) assaying the extract for the presence and quantity
XX CC of telomerase RNA or telomerase activity; and (d) comparing the results
XX CC with normal levels, to determine the presence of cancer. The methods are
XX CC used in cancer diagnosis and prognosis, and also to monitor cancer
XX CC therapy effectiveness. Unlike prior art telomerase activity assays in
XX CC cancer patients, the method allows noninvasive sample collection. The
XX CC methods are also more reliable and less tumour specific than other
XX CC methods which detect circulating tumour markers. The present sequence
XX CC represents a human telomerase RNA template PCR primer used in the
XX CC exemplification of the present invention
XX SQ Sequence 25 BP; 7 A; 3 C; 9 G; 6 T; 0 U; 0 Other;

Query Match 5.3%; Score 24; DB 1; Length 25;
Best Local Similarity 100.0%; Pred. No. 82;
Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 145 CTTCCACGGTTCATTCTAGACAA 168
Db |||||
25 CTTCCACGGTTCATTCTAGACAA 2

RESULT 94
AAT89246
ID AAT89246 standard; DNA; 23 BP.
AC AAT89246;
XX
XX DT 12-MAY-1998 (first entry)
XX DE DNA oligonucleotide 2, used in the measurement of Tm values.
XX KW Peptide nucleic acid; PNA; cancer; telomerase; probe; hybridisation;
XX KW inhibitor; human telomerase RNA; hTR; PCR; oligonucleotide; ss.
XX OS Synthetic.
XX PN WO9738013-A1.
XX PD 16-OCT-1997.
XX PF 09-APR-1997; 97WO-US005931.
XX PR 09-APR-1996; 96US-00630019.
XX PA (GERO-) GERON CORP.
XX PI Shay JW, Wright WE, Piatyszek MA, Corey D, Norton JC;
XX DR WPI; 1997-512647/47.

XX PD 19-AUG-1999.
XX PF 16-FEB-1999; 99WO-US003302.
XX PR 16-FEB-1998; 98US-0074793P.
XX PS Example 2; Page 49; 76pp; English.
XX CC This is an oligonucleotide used in the measurement of Tm values and their
XX CC complementary peptide nucleic acids (PNAs), (e.g. AAT89225-T89227). PNAs
XX CC hybridise specifically to an RNA component of mammalian telomerase, and
XX CC include the sequence GGG for specific hybridisation to the template
XX CC region of this component. PNAs can be used as probes to detect the RNA
XX CC component of mammalian telomerase and as inhibitors of telomerase
XX CC activity, especially in the treatment of cancer
XX SQ Sequence 23 BP; 5 A; 7 C; 1 G; 10 T; 0 U; 0 Other;

Query Match 5.1%; Score 23; DB 1; Length 23;
Best Local Similarity 100.0%; Pred. No. 89;
Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 35 CCATTTTTCCTAACCCCTAACT 57
Db |||||
1 CCATTTTTCCTAACCCCTAACT 23

RESULT 95
AAA37568
ID AAA37568 standard; DNA; 23 BP.
XX
XX AC AAA37568;
XX DT 15-AUG-2000 (first entry)
XX DE PNA sequence #26 used to inhibit telomerase activity.
XX KW Peptide nucleic acid; PNA; telomerase; ribonucleoprotein enzyme; cancer;
XX KW inhibitor; neoplasia; neurodegenerative disease; aging; hyperplasia;
XX KW AIDS; HIV; fungal infection; forensic identification; detect; tumour;
XX KW paternity testing; ss.
XX OS Synthetic.
XX FH Key Location/Qualifiers
XX FT misc_feature 1..23
XX FT /*tag= a
XX FT /note= "Peptide nucleic acid molecule, where N-(2-
XX FT aminoethyl)glycine units are linked to nucleotide bases
XX FT via glycine amino N through a methylenecarbonyl linker"
XX PN US6046307-A.
XX PD 04-APR-2000.
XX PF 09-APR-1997; 97US-00838545.
XX PR 09-APR-1996; 96US-00630019.
XX PA (TEXA ) UNIV TEXAS SYSTEM.
XX PI Wright WE, Piatyszek MA, Shay JW, Norton JC, Corey DR;
XX DR WPI; 2000-292432/25.
XX PT New peptide nucleic acid (PNA) compounds that inhibit telomerase activity
XX PF in mammalian cells is useful as probes to detect the RNA component of a
XX PF mammalian telomerase.
XX PS Example 2; Col 33; 45pp; English.
XX CC The present sequence represents a peptide nucleic acid molecule which
XX CC hybridises to the mRNA component of mammalian telomerase, and inhibits
XX CC telomerase activity. Telomerase is a ribonucleoprotein enzyme that
```

CC synthesizes one strand of the telomeric DNA, using as a template an 11  
CC nucleotide sequence contained within the RNA component of the enzyme. The  
CC invention relates to PNA molecules having a sequence of no more than 25  
CC bases, which include the sequence GTTAGG. The uncharged nature of the PNA  
CC backbone increases the melting temperature of associating strands,  
CC increases the rate of association with targeted nucleic acids, and  
CC affords greater resistance of degradation by proteases or nucleases. The  
CC therapeutic PNAs may be used for treating disease conditions such as  
CC cancers, neoplasia, hyperplasia, neurodegenerative diseases, aging, human  
CC immunodeficiency virus (HIV) infection/AIDS (acquired immunodeficiency  
CC syndrome) and associated pathologies, fungal infections, and other  
CC diseases characterized by abnormal telomere metabolism or telomerase  
CC activity, in combination with antineoplastic and other cytotoxic or  
CC cytostatic agents, antifungal agents, and other nucleotides. PNAs may be  
CC used for molecular diagnostics, labelled PNAs are used as hybridization  
CC probes to detect or quantitate polynucleotides having a human telomerase  
CC RNA (hTR) sequence. PNA probes are also used for forensic identification  
CC of individuals, e.g. paternity testing, based on hTR gene restriction  
CC fragment length polymorphism (RFLP) pattern. PNAs are also useful as  
CC probes to detect the RNA component of a mammalian telomerase and as  
CC inhibitors of telomerase activity. The method of the present invention  
CC allows cancerous conditions to be detected with increased confidence and  
CC possibly at an earlier stage, before cells are detected as cancerous  
CC based on pathological characteristics. The diagnostic and prognostic  
CC methods of the present invention can be used to detect an immortal or  
CC neoplastic cell or tumour tissue or cancer of any origin, provided the  
CC cell expresses telomerase activity and its RNA component

XX  
SQ Sequence 23 BP; 5 A; 7 C; 1 G; 10 T; 0 U; 0 Other;

Query Match 5.1%; Score 23; DB 1; Length 23;  
Best Local Similarity 100.0%; Pred. No. 89;  
Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 35 CCATTTTGTCTAACCCCTAACT 57  
|||||  
Db 1 CCATTTTGTCTAACCCCTAACT 23

RESULT 96  
AAS15446  
ID AAS15446 standard; DNA; 23 BP.  
XX  
AC AAS15446;  
XX  
DT 14-FEB-2002 (first entry)  
XX  
DE Oligonucleotide #2 used in melting temperature studies of PNAs.  
XX  
KW Mammalian; paternity testing; human telomerase RNA component;  
KW hTR gene RFLP pattern; cancer; inflammation; forensic;  
KW lymphoproliferative disease; autoimmune disease; hyperplasia;  
KW neurodegenerative disease; neoplasia; HIV; AIDS; cytostatic;  
KW human immunodeficiency virus; acquired immunodeficiency syndrome;  
KW telomere metabolism; anti-inflammatory; immunosuppressive; ss.  
XX  
OS Homo sapiens.  
OS Synthetic.  
XX  
FN US6294650-B1.  
XX  
PD 25-SEP-2001.  
XX  
PF 08-JUL-1999; 99US-00349532.  
XX  
PR 09-APR-1996; 96US-00630019.  
PR 09-APR-1997; 97US-00838545.  
XX  
PA (TEXA ) UNIV TEXAS SYSTEM.  
XX  
PI Shay JW, Wright WE, Piatyszek MA, Corey DR, Norton JC;  
XX WPI; 2001-638024/73.  
XX

XX New peptide nucleic acids that hybridizes to the RNA component of  
PT mammalian telomerase, useful for treating or preventing cancer, or  
PT inflammation, lymphoproliferative diseases, autoimmune disease, or  
PT neurodegenerative diseases.  
XX  
PS Example 2; Col 34; 46pp; English.  
XX  
CC The present invention relates to peptide nucleic acids (PNAs), comprising  
CC a sequence of 6-25 nucleobases, that inhibit telomerase activity in  
CC mammalian cells by hybridising to the RNA component of mammalian  
CC telomerase. The PNAs are useful as probes to detect the RNA component of  
CC mammalian telomerase and as inhibitors of telomerase activity, or to  
CC detect and/or quantitate polynucleotide having the human telomerase RNA  
CC component (hTR) sequence, as well as in forensic identification of  
CC individuals, such as paternity testing or identification of criminal  
CC suspects or unknown descendants based on the hTR gene RFLP pattern. The  
CC PNA can be further used for treating or preventing cancer, inflammation,  
CC lymphoproliferative diseases, autoimmune disease, or neurodegenerative  
CC diseases. The PNAs in combination with other pharmaceuticals (such as  
CC antineoplastic or cytostatic agents) can be used for treating neoplasia,  
CC hyperplasia, human immunodeficiency virus (HIV) infections, acquired  
CC immunodeficiency syndrome (AIDS) and associated pathologies, and other  
CC diseases characterised by abnormal telomere metabolism or telomerase  
CC activity. The present sequence representing a DNA oligonucleotide is  
CC complementary to some of the PNAs of the present invention, and is used  
CC in melting temperature studies

XX  
SQ Sequence 23 BP; 5 A; 7 C; 1 G; 10 T; 0 U; 0 Other;

Query Match 5.1%; Score 23; DB 1; Length 23;  
Best Local Similarity 100.0%; Pred. No. 89;  
Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 35 CCATTTTGTCTAACCCCTAACT 57  
|||||  
Db 1 CCATTTTGTCTAACCCCTAACT 23

RESULT 97  
ADF93794  
ID ADF93794 standard; mRNA; 23 BP.  
XX  
AC ADF93794;  
XX  
DT 26-FEB-2004 (first entry)  
XX  
DE Human TERC mRNA transcript target sequence, SEQ ID 521.  
XX  
KW Cytostatic; vasotropic; protozoacide; immunosuppressive; dermatological;  
KW neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;  
KW antiarthritic; antiinflammatory; gene therapy; telomerase; human; terc;  
KW RNA interference; short interfering nucleic acid; siNA;  
KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;  
KW short hairpin RNA; shRNA; expression modulation; gene therapy;  
KW drug screening; diagnosis; therapeutic target identification;  
KW pharmacogenomics; gene function analysis; gene mapping; TERC; ss.  
XX  
OS Homo sapiens.  
XX  
FN WO2003070742-A1.  
XX  
PD 28-AUG-2003.  
XX  
PF 11-FEB-2003; 2003WO-US004088.  
XX  
PR 20-FEB-2002; 2002US-0358580P.  
PR 11-MAR-2002; 2002US-0363124P.  
PR 06-JUN-2002; 2002US-0386782P.  
PR 17-JUL-2002; 2002US-0396600P.  
PR 29-AUG-2002; 2002US-0406784P.  
PR 05-SEP-2002; 2002US-0408378P.  
PR 09-SEP-2002; 2002US-0409293P.  
XX







RESULT 101  
ID ADF93802 standard; mRNA; 23 BP.  
XX  
XX  
AC ADF93802;  
XX  
DT 26-FEB-2004 (first entry)  
XX  
DE Human TERT mRNA transcript target sequence, SEQ ID 529.  
XX  
XX  
KW Cytostatic; vasotropic; protozoacide; immunosuppressive; dermatological;  
KW neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;  
KW antiarthritic; antiinflammatory; gene therapy; telomerase; human; terc;  
KW RNA interference; short interfering nucleic acid; siRNA;  
KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;  
KW short hairpin RNA; shRNA; expression modulation; gene therapy;  
KW drug screening; diagnosis; therapeutic target identification;  
KW pharmacogenomics; gene function analysis; gene mapping; TERC; TERT; ss.  
XX  
XX  
OS Homo sapiens.  
XX  
PN WO2003070742-A1.  
XX  
PD 28-AUG-2003.  
XX  
XX  
PF 11-FEB-2003; 2003WO-US004088.  
XX  
PR 20-FEB-2002; 2002US-0358580P.  
PR 11-MAR-2002; 2002US-0363124P.  
PR 06-JUN-2002; 2002US-0386782P.  
PR 17-JUL-2002; 2002US-0396600P.  
PR 29-AUG-2002; 2002US-0406784P.  
PR 05-SEP-2002; 2002US-0408378P.  
PR 09-SEP-2002; 2002US-0409293P.  
PR 15-JAN-2003; 2003US-0440129P.  
XX  
PA (RIBO-) RIBOZYME PHARM INC.  
XX  
PI Mcswiggen J, Beigelman L;  
XX  
XX WPI; 2003-689777/65.  
XX  
PT New short interfering nucleic acid downregulates expression of the  
telomerase gene useful e.g. for treatment and diagnosis of cancer.  
XX  
PS Disclosure; SEQ ID NO 529; 145pp; English.  
XX  
XX  
CC The invention relates to short interfering nucleic acids (siNA) which  
downregulate expression of the one or more telomerase genes by RNA  
interference. The siNAs may or may not comprise ribonucleotides and may  
be double or single stranded. They further comprise sense and antisense  
regions, or alternatively are assembled from a sense oligonucleotide and  
an antisense oligonucleotide. Specifically, the siNAs include short  
interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short  
hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,  
can contain deoxyribonucleotides, and can be chemically synthesised,  
expressed from a vector or enzymatically synthesised. The invention also  
relates to kits for the in vitro or in vivo delivery of siNA, conjugates  
and/or complexes of siNA; and vectors that express siNA. The siNAs are  
used to modulate expression of the telomerase genes in cells, tissue  
explants or organisms (e.g., by ex vivo gene therapy), or in grafts and  
transplants for the treatment of a variety of conditions. They may be  
used for treating cancer, restenosis, infectious diseases (specifically  
protozoal), transplant rejection, or autoimmune or age-related diseases,  
e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,  
skin ulcers and rheumatoid arthritis. The siNAs are also useful for drug  
screening, diagnosis, therapeutic target identification and validation,  
genetic engineering, pharmacogenomics, studying gene function, and gene  
mapping (e.g., of single nucleotide polymorphisms). The present sequence  
represents a human TERT transcript target sequence.

SQ Sequence 23 BP; 2 A; 11 C; 4 G; 0 T; 6 U; 0 Other;  
Query Match 5.1%; Score 23; DB 1; Length 23;  
Best Local Similarity 73.9%; Pred. No. 89;  
Matches 17; Conservative 6; Mismatches 0; Indels 0; Gaps 0;  
Qy 136 GCCTGCCGCTTCACCGTTTCAT 158  
||:|||||:|||||:|:  
Db 1 GCTUGCGCCUCCACCGUCAU 23  
RESULT 102  
ADFP3804  
ID ADF93804 standard; mRNA; 23 BP.  
XX  
XX ADF93804;  
XX  
DT 26-FEB-2004 (first entry)  
XX  
DE Human TERT mRNA transcript target sequence, SEQ ID 531.  
XX  
XX  
KW Cytostatic; vasotropic; protozoacide; immunosuppressive; dermatological;  
KW neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;  
KW antiarthritic; antiinflammatory; gene therapy; telomerase; human; terc;  
KW RNA interference; short interfering nucleic acid; siNA;  
KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;  
KW short hairpin RNA; shRNA; expression modulation; gene therapy;  
KW drug screening; diagnosis; therapeutic target identification;  
KW pharmacogenomics; gene function analysis; gene mapping; TERC; TERT; ss.  
XX  
XX  
OS Homo sapiens.  
XX  
PN WO2003070742-A1.  
XX  
PD 28-AUG-2003.  
XX  
XX  
PF 11-FEB-2003; 2003WO-US004088.  
XX  
PR 20-FEB-2002; 2002US-0358580P.  
PR 11-MAR-2002; 2002US-0363124P.  
PR 06-JUN-2002; 2002US-0386782P.  
PR 17-JUL-2002; 2002US-0396600P.  
PR 29-AUG-2002; 2002US-0406784P.  
PR 05-SEP-2002; 2002US-0408378P.  
PR 09-SEP-2002; 2002US-0409293P.  
PR 15-JAN-2003; 2003US-0440129P.  
XX  
PA (RIBO-) RIBOZYME PHARM INC.  
XX  
PI Mcswiggen J, Beigelman L;  
XX  
XX WPI; 2003-689777/65.  
XX  
PT New short interfering nucleic acid downregulates expression of the  
telomerase gene useful e.g. for treatment and diagnosis of cancer.  
XX  
PS Disclosure; SEQ ID NO 531; 145pp; English.  
XX  
XX  
CC The invention relates to short interfering nucleic acids (siNA) which  
downregulate expression of the one or more telomerase genes by RNA  
interference. The siNAs may or may not comprise ribonucleotides and may  
be double or single stranded. They further comprise sense and antisense  
regions, or alternatively are assembled from a sense oligonucleotide and  
an antisense oligonucleotide. Specifically, the siNAs include short  
interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short  
hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,  
can contain deoxyribonucleotides, and can be chemically synthesised,  
expressed from a vector or enzymatically synthesised. The invention also  
relates to kits for the in vitro or in vivo delivery of siNA, conjugates  
and/or complexes of siNA; and vectors that express siNA. The siNAs are  
used to modulate expression of the telomerase genes in cells, tissue  
explants or organisms (e.g., by ex vivo gene therapy), or in grafts and  
transplants for the treatment of a variety of conditions. They may be  
used for treating cancer, restenosis, infectious diseases (specifically  
protozoal), transplant rejection, or autoimmune or age-related diseases,  
e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,  
skin ulcers and rheumatoid arthritis. The siNAs are also useful for drug  
screening, diagnosis, therapeutic target identification and validation,  
genetic engineering, pharmacogenomics, studying gene function, and gene  
mapping (e.g., of single nucleotide polymorphisms). The present sequence  
represents a human TERT transcript target sequence.

used for treating cancer, restenosis, infectious diseases (specifically protozoal), transplant rejection, or autoimmune or age-related diseases, e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration, skin ulcers and rheumatoid arthritis. The siRNAs are also useful for drug screening, diagnosis, therapeutic target identification and validation, genetic engineering, pharmacogenomics, studying gene function, and gene mapping (e.g., of single nucleotide polymorphisms). The present sequence represents a human TERT transcript target sequence.

Sequence 23 BP; 2 A; 8 C; 9 G; 0 T; 4 U; 0 Other;

Query Match 5.1%; Score 23; DB 1; Length 23;  
Best Local Similarity 82.6%; Pred. No. 89;  
Matches 19; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

QY 395 GCGCGCGCGATTCCTGAGCTG 417

DB 1 GCGCGCGCGAUCUCCUGAGCUG 23

#### RESULT 103

ID ADF93801  
AD F93801 standard; mRNA; 23 BP.

AC ADF93801;

DT 26-FEB-2004 (first entry)

DE Human TERT mRNA transcript target sequence, SEQ ID 528.

KW Cytostatic; vasotropic; protozoicide; immunosuppressive; dermatological;  
KW neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;  
KW antiarthritic; antiinflammatory; gene therapy; telomerase; human; terc;  
KW RNA interference; short interfering nucleic acid; siRNA;  
KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;  
KW short hairpin RNA; shRNA; expression modulation; gene therapy;  
KW drug screening; diagnosis; therapeutic target identification;  
KW pharmacogenomics; gene function analysis; gene mapping; TERC; TERT; ss.

OS Homo sapiens.

PN WO200307042-A1.

PD 28-AUG-2003.

PF 11-FEB-2003; 2003WO-US004088.

PR 20-FEB-2002; 2002US-0358580P.

PR 11-MAR-2002; 2002US-0363124P.

PR 06-JUN-2002; 2002US-0386782P.

PR 17-JUL-2002; 2002US-0396600P.

PR 29-AUG-2002; 2002US-0406784P.

PR 05-SEP-2002; 2002US-0408378P.

PR 09-SEP-2002; 2002US-0409293P.

PR 15-JAN-2003; 2003US-0440129P.

PA (RIBO-) RIBOZYME PHARM INC.

PI Mcswiggen J, Beigelman L;

DR WPI; 2003-689777/65.

PT New short interfering nucleic acid downregulates expression of the  
telomerase gene useful e.g. for treatment and diagnosis of cancer.

PS Disclosure; SEQ ID NO 528; 145pp; English.

XX The invention relates to short interfering nucleic acids (siRNA) which  
downregulate expression of the one or more telomerase genes by RNA  
interference. The siRNAs may or may not comprise ribonucleotides and may  
be double or single stranded. They further comprise sense and antisense  
regions, or alternatively are assembled from a sense oligonucleotide and  
an antisense oligonucleotide. Specifically, the siRNAs include short

interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short  
hairpin RNA (shRNA). The siRNAs can be unmodified or chemically modified,  
can contain deoxyribonucleotides, and can be chemically synthesized,  
expressed from a vector or enzymatically synthesized. The invention also  
relates to kits for the in vitro or in vivo delivery of siRNA; conjugates  
and/or complexes of siRNA; and vectors that express siRNA. The siRNAs are  
used to modulate expression of the telomerase genes in cells, tissue  
explants or organisms (e.g., by ex vivo gene therapy), or in grafts and  
transplants for the treatment of a variety of conditions. They may be  
used for treating cancer, restenosis, infectious diseases (specifically  
protozoal), transplant rejection, or autoimmune or age-related diseases,  
e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,  
skin ulcers and rheumatoid arthritis. The siRNAs are also useful for drug  
screening, diagnosis, therapeutic target identification and validation,  
genetic engineering, pharmacogenomics, studying gene function, and gene  
mapping (e.g., of single nucleotide polymorphisms). The present sequence  
represents a human TERT transcript target sequence.

Sequence 23 BP; 2 A; 3 C; 14 G; 0 T; 4 U; 0 Other;

Query Match 5.1%; Score 23; DB 1; Length 23;  
Best Local Similarity 82.6%; Pred. No. 89;  
Matches 19; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

QY 2 GGTTCGCGAGGCTGGCGCTGGGA 24

DB 1 GGUUGCGGAGGUGGCGCUGGGA 23

#### RESULT 104

ID ADG29526  
ADG29526 standard; RNA; 23 BP.

AC ADG29526;

DT 26-FEB-2004 (first entry)

DE hTR siRNA-target RNA - SEQ ID 92.

KW double-stranded short interfering nucleic acid; siRNA;  
KW antiarteriosclerotic; neuroprotective; nootropic; antiparkinsonian;  
KW anticonvulsant; pulmonary disease; restenosis; atherosclerosis;  
KW Alzheimer's; Parkinson's; epilepsy; dementia; huntington's;  
KW amyotrophic lateral sclerosis; gene therapy; target; ss; hTR.

OS Unidentified.

PN WO2003074654-A2.

PD 12-SEP-2003.

PF 20-FEB-2003; 2003WO-US005028.

PR 20-FEB-2002; 2002US-0358580P.

PR 11-MAR-2002; 2002US-0363124P.

PR 06-JUN-2002; 2002US-0386782P.

PR 29-AUG-2002; 2002US-0406784P.

PR 05-SEP-2002; 2002US-0408378P.

PR 09-SEP-2002; 2002US-0409293P.

PR 15-JAN-2003; 2003US-0440129P.

PA (SIRN-) SIRNA THERAPEUTICS INC.

PI Mcswiggen J, Beigelman L, Chowkira B, Pavco P, Fosnaugh K;

PI Jamison S, Usman N, Thompson J;

DR WPI; 2003-731676/69.

XX New double-stranded short interfering nucleic acid molecule, useful for  
down-regulating the expression of an endogenous mammalian target gene or  
PT for treating diseases that respond to modulation of gene expression or  
PT activity.

PS Example 24; SEQ ID NO 92; 593pp; English.

XX

CC The invention relates to a double-stranded short interfering nucleic acid

CC (siNA) molecule that down-regulates expression of an endogenous mammalian

CC target gene comprising one or more chemical modifications and each strand

CC of the double-stranded siNA comprises about 21 nucleotides. The siNA of

CC the invention demonstrates antiarteriosclerotic, neuroprotective, and

CC neurotropic, antiparkinsonian and anticonvulsant activities and may be

CC useful for down-regulating the expression of an endogenous mammalian

CC target gene and therefore in the treatment of any disease or condition

CC that responds to modulation of gene expression or activity in a cell,

CC tissue or organism. The disease or condition may include pulmonary

CC diseases such as restenosis, atherosclerosis, Alzheimer's disease,

CC Parkinson's disease, epilepsy, dementia, Huntington's disease or

CC amyotrophic lateral sclerosis. Furthermore, the siNA may be utilized for

CC gene therapy applications. The current sequence is that of the siNA

CC target DNA of the invention.

XX

SQ Sequence 23 BP; 4 A; 5 C; 9 G; 0 T; 5 U; 0 Other;

Query Match 5.1%; Score 23; DB 1; Length 23;

Best Local Similarity 78.3%; Pred. No. 89;

Matches 18; Conservative 5; Mismatches 0; Indels 0; Gaps 0;

Qy 298 GCGAAGAGTGGGCTCTCTCAGC 320

Db 1 GCGAAGAGUUGGCGUCUGCAGC 23

RESULT 105

ADG29519

ID ADG29519 standard; RNA; 23 BP.

XX AC

XX ADG29519;

XX

DT 26-FEB-2004 (first entry)

XX

DE hTR siNA-target RNA - SEQ ID 85.

XX

KW double-stranded short interfering nucleic acid; siNA;

KW antiarteriosclerotic; neuroprotective; neurotropic; antiparkinsonian;

KW anticonvulsant; pulmonary disease; restenosis; atherosclerosis;

KW Alzheimer's; Parkinson's; epilepsy; dementia; Huntington's;

KW amyotrophic lateral sclerosis; gene therapy; target; ss; hTR.

XX

OS Unidentified.

XX

PN WO2003074654-A2.

XX

PD 12-SEP-2003.

XX

PF 20-FEB-2003; 2003WO-US005028.

XX

PR 20-FEB-2002; 2002US-0359580P.

PR 11-MAR-2002; 2002US-0363124P.

PR 06-JUN-2002; 2002US-0366782P.

PR 29-AUG-2002; 2002US-0406784P.

PR 05-SEP-2002; 2002US-0408378P.

PR 09-SEP-2002; 2002US-0409293P.

PR 15-JAN-2003; 2003US-0440129P.

XX

PA (SIRN-) SIRNA THERAPEUTICS INC.

XX

PI McSwiggen J, Beigelman L, Chowrira B, Pavco P, Fosnaugh K;

PI Jamison S, Usman N, Thompson J;

XX

XX WPI; 2003-731676/69.

DR

XX New double-stranded short interfering nucleic acid molecule, useful for

PT down-regulating the expression of an endogenous mammalian target gene or

PT for treating diseases that respond to modulation of gene expression or

PT activity.

XX

PS Example 24; SEQ ID NO 85; 593pp; English.

XX

CC The invention relates to a double-stranded short interfering nucleic acid

CC (siNA) molecule that down-regulates expression of an endogenous mammalian

CC target gene comprising one or more chemical modifications and each strand

CC of the double-stranded siNA comprises about 21 nucleotides. The siNA of

CC the invention demonstrates antiarteriosclerotic, neuroprotective, and

CC neurotropic, antiparkinsonian and anticonvulsant activities and may be

CC useful for down-regulating the expression of an endogenous mammalian

CC target gene and therefore in the treatment of any disease or condition

CC that responds to modulation of gene expression or activity in a cell,

CC tissue or organism. The disease or condition may include pulmonary

CC diseases such as restenosis, atherosclerosis, Alzheimer's disease,

CC Parkinson's disease, epilepsy, dementia, Huntington's disease or

CC amyotrophic lateral sclerosis. Furthermore, the siNA may be utilized for

CC gene therapy applications. The current sequence is that of the siNA

CC target DNA of the invention.

XX

SQ Sequence 23 BP; 2 A; 3 C; 14 G; 0 T; 4 U; 0 Other;

Query Match 5.1%; Score 23; DB 1; Length 23;

Best Local Similarity 82.6%; Pred. No. 89;

Matches 19; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

Qy 2 GGTTCGCGAGGCTGGCGCTGGGA 24

Db 1 GGUUGCGGAGGUGGCGGCGGGA 23

RESULT 106

ADG29525

ID ADG29525 standard; RNA; 23 BP.

XX AC

XX ADG29525;

XX

DT 26-FEB-2004 (first entry)

XX

DE hTR siNA-target RNA - SEQ ID 91.

XX

KW double-stranded short interfering nucleic acid; siNA;

KW antiarteriosclerotic; neuroprotective; neurotropic; antiparkinsonian;

KW anticonvulsant; pulmonary disease; restenosis; atherosclerosis;

KW Alzheimer's; Parkinson's; epilepsy; dementia; Huntington's;

KW amyotrophic lateral sclerosis; gene therapy; target; ss; hTR.

XX

OS Unidentified.

XX

PN WO2003074654-A2.

XX

PD 12-SEP-2003.

XX

PF 20-FEB-2003; 2003WO-US005028.

XX

PR 20-FEB-2002; 2002US-0359580P.

PR 11-MAR-2002; 2002US-0363124P.

PR 06-JUN-2002; 2002US-0366782P.

PR 29-AUG-2002; 2002US-0406784P.

PR 05-SEP-2002; 2002US-0408378P.

PR 09-SEP-2002; 2002US-0409293P.

PR 15-JAN-2003; 2003US-0440129P.

XX

PA (SIRN-) SIRNA THERAPEUTICS INC.

XX

PI McSwiggen J, Beigelman L, Chowrira B, Pavco P, Fosnaugh K;

PI Jamison S, Usman N, Thompson J;

XX

XX WPI; 2003-731676/69.

DR

XX New double-stranded short interfering nucleic acid molecule, useful for

PT down-regulating the expression of an endogenous mammalian target gene or

PT for treating diseases that respond to modulation of gene expression or

PT activity.

XX

```
PS Example 24; SEQ ID NO 91; 593pp; English.
XX
CC The invention relates to a double-stranded short interfering nucleic acid
CC (siNA) molecule that down-regulates expression of an endogenous mammalian
CC target gene comprising one or more chemical modifications and each strand
CC of the double-stranded siNA comprises about 21 nucleotides. The siNA of
CC the invention demonstrates antiarteriosclerotic, neuroprotective,
CC neurotropic, antiparkinsonian and anticonvulsant activities and may be
CC useful for down-regulating the expression of an endogenous mammalian
CC target gene and therefore in the treatment of any disease or condition
CC that responds to modulation of gene expression or activity in a cell,
CC tissue or organism. The disease or condition may include pulmonary
CC diseases such as restenosis, atherosclerosis, Alzheimer's disease,
CC Parkinson's disease, epilepsy, dementia, huntington's disease or
CC amyotrophic lateral sclerosis. Furthermore, the siNA may be utilised for
CC gene therapy applications. The current sequence is that of the siNA
CC target DNA of the invention.
XX
SQ Sequence 23 BP; 6 A; 7 C; 3 G; 0 T; 7 U; 0 Other;
    Query Match      5.1%; Score 23; DB 1; Length 23;
    Best Local Similarity 69.6%; Pred. No. 89;
    Matches 16; Conservative 7; Mismatches 0; Indels 0; Gaps 0;

QY 146 TTCCACCGTTCATTCTAGACAA 168
Db 1 UUCACCGUUCUUCAGACAA 23
    :|||||:|||||:|||||:|||||:
    1 UUCACCGUUCUUCAGACAA 23

RESULT 107
ADG29521
ID ADG29521 standard; RNA; 23 BP.
XX
AC ADG29521;
XX
DT 26-FEB-2004 (first entry)
XX
DE hTR siNA-target RNA - SEQ ID 87.
XX
KW double-stranded short interfering nucleic acid; siNA;
KW antiarteriosclerotic; neuroprotective; neurotropic; antiparkinsonian;
KW anticonvulsant; pulmonary disease; restenosis; atherosclerosis;
KW Alzheimer's; Parkinson's; epilepsy; dementia; huntington's;
KW amyotrophic lateral sclerosis; gene therapy; target; ss; hTR.
XX
OS Unidentified.
XX
PN WO2003074654-A2.
XX
PD 12-SEP-2003.
XX
PF 20-FEB-2003; 2003WO-US005028.
XX
PR 20-FEB-2002; 2002US-0358580P.
PR 11-MAR-2002; 2002US-0363124P.
PR 06-JUN-2002; 2002US-0386782P.
PR 29-AUG-2002; 2002US-0406784P.
PR 05-SEP-2002; 2002US-0408378P.
PR 09-SEP-2002; 2002US-0409293P.
PR 15-JAN-2003; 2003US-0440129P.
XX
PA (SIRN-) SIRNA THERAPEUTICS INC.
XX
PI Mcswiggen J, Beigelman L, Chowrira B, Pavco P, Fosnaugh K;
PI Jamison S, Usman N, Thompson J;
XX
DR WPI; 2003-731676/69.
XX
PT New double-stranded short interfering nucleic acid molecule, useful for
PT down-regulating the expression of an endogenous mammalian target gene or
PT for treating diseases that respond to modulation of gene expression or
PT activity.
XX
```

---

```
PS Example 24; SEQ ID NO 87; 593pp; English.
XX
CC The invention relates to a double-stranded short interfering nucleic acid
CC (siNA) molecule that down-regulates expression of an endogenous mammalian
CC target gene comprising one or more chemical modifications and each strand
CC of the double-stranded siNA comprises about 21 nucleotides. The siNA of
CC the invention demonstrates antiarteriosclerotic, neuroprotective,
CC neurotropic, antiparkinsonian and anticonvulsant activities and may be
CC useful for down-regulating the expression of an endogenous mammalian
CC target gene and therefore in the treatment of any disease or condition
CC that responds to modulation of gene expression or activity in a cell,
CC tissue or organism. The disease or condition may include pulmonary
CC diseases such as restenosis, atherosclerosis, Alzheimer's disease,
CC Parkinson's disease, epilepsy, dementia, huntington's disease or
CC amyotrophic lateral sclerosis. Furthermore, the siNA may be utilised for
CC gene therapy applications. The current sequence is that of the siNA
CC target DNA of the invention.
XX
SQ Sequence 23 BP; 6 A; 10 C; 6 G; 0 T; 1 U; 0 Other;
    Query Match      5.1%; Score 23; DB 1; Length 23;
    Best Local Similarity 95.7%; Pred. No. 89;
    Matches 22; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 283 GCACCCACTGCCACCGCGAAGAG 305
Db 1 GCACCCACUGCCACCGCGAAGAG 23
    |||||:|||||:|||||:|||||
    1 GCACCCACUGCCACCGCGAAGAG 23

RESULT 108
ADG29524
ID ADG29524 standard; RNA; 23 BP.
XX
AC ADG29524;
XX
DT 26-FEB-2004 (first entry)
XX
DE hTR siNA-target RNA - SEQ ID 90.
XX
KW double-stranded short interfering nucleic acid; siNA;
KW antiarteriosclerotic; neuroprotective; neurotropic; antiparkinsonian;
KW anticonvulsant; pulmonary disease; restenosis; atherosclerosis;
KW Alzheimer's; Parkinson's; epilepsy; dementia; huntington's;
KW amyotrophic lateral sclerosis; gene therapy; target; ss; hTR.
XX
OS Unidentified.
XX
PN WO2003074654-A2.
XX
PD 12-SEP-2003.
XX
PF 20-FEB-2003; 2003WO-US005028.
XX
PR 20-FEB-2002; 2002US-0358580P.
PR 11-MAR-2002; 2002US-0363124P.
PR 06-JUN-2002; 2002US-0386782P.
PR 29-AUG-2002; 2002US-0406784P.
PR 05-SEP-2002; 2002US-0408378P.
PR 09-SEP-2002; 2002US-0409293P.
PR 15-JAN-2003; 2003US-0440129P.
XX
PA (SIRN-) SIRNA THERAPEUTICS INC.
XX
PI Mcswiggen J, Beigelman L, Chowrira B, Pavco P, Fosnaugh K;
PI Jamison S, Usman N, Thompson J;
XX
DR WPI; 2003-731676/69.
XX
PT New double-stranded short interfering nucleic acid molecule, useful for
PT down-regulating the expression of an endogenous mammalian target gene or
PT for treating diseases that respond to modulation of gene expression or
PT activity.
XX
```

PS Example 24; SEQ ID NO 90; 593pp; English.

XX The invention relates to a double-stranded short interfering nucleic acid  
CC (siNA) molecule that down-regulates expression of an endogenous mammalian  
CC target gene comprising one or more chemical modifications and each strand  
CC of the double-stranded siNA comprises about 21 nucleotides. The siNA of  
CC the invention demonstrates antiarteriosclerotic, neuroprotective,  
CC neurotropic, antiparkinsonian and anticonvulsant activities and may be  
CC useful for down-regulating the expression of an endogenous mammalian  
CC target gene and therefore in the treatment of any disease or condition  
CC that responds to modulation of gene expression or activity in a cell,  
CC tissue or organism. The disease or condition may include pulmonary  
CC diseases such as restenosis, atherosclerosis, Alzheimer's disease,  
CC Parkinson's disease, epilepsy, dementia, Huntington's disease or  
CC amyotrophic lateral sclerosis. Furthermore, the siNA may be utilised for  
CC gene therapy applications. The current sequence is that of the siNA  
CC target DNA of the invention.

XX SQ Sequence 23 BP; 4 A; 9 C; 3 G; 0 T; 7 U; 0 Other;

Query Match 5.1%; Score 23; DB 1; Length 23;  
Best Local Similarity 69.6%; Pred. No. 89;  
Matches 16; Conservative 7; Mismatches 0; Indels 0; Gaps 0;

Qy 144 CCTCCACCGCTTCATCTAGAGC 166  
|||:|||||:|||||:|||||  
Db 1 CCUCCACCGUUCACUAGAGC 23

RESULT 109

ADG29520

ID ADG29520 standard; RNA; 23 BP.

XX AC ADG29520;

XX DT 26-FEB-2004 (first entry)

XX DE hTR siNA-target RNA - SEQ ID 86.

XX double-stranded short interfering nucleic acid; siNA;  
KW antiarteriosclerotic; neuroprotective; neurotropic; antiparkinsonian;  
KW anticonvulsant; pulmonary disease; restenosis; atherosclerosis;  
KW Alzheimer's; Parkinson's; epilepsy; dementia; Huntington's;  
KW amyotrophic lateral sclerosis; gene therapy; target; ss; hTR.

XX OS Unidentified.

XX PN WO2003074654-A2.

XX PD 12-SEP-2003.

XX PF 20-FEB-2003; 2003WO-US005028.

XX PR 20-FEB-2002; 2002US-0358580P.

PR 11-MAR-2002; 2002US-0363124P.

PR 06-JUN-2002; 2002US-0386782P.

PR 29-AUG-2002; 2002US-0406784P.

PR 05-SEP-2002; 2002US-0408378P.

PR 09-SEP-2002; 2002US-0409293P.

PR 15-JAN-2003; 2003US-0440129P.

XX (SIRN-) SIRNA THERAPEUTICS INC.

XX PI Mcawiggen J, Beigelman L, Chowrira B, Pavco P, Fosnaugh K;

PI Jamison S, Usman N, Thompson J;

XX WPI; 2003-731676/69.

XX New double-stranded short interfering nucleic acid molecule, useful for

PT down-regulating the expression of an endogenous mammalian target gene or

PT for treating diseases that respond to modulation of gene expression or

PT activity.

XX

PS Example 24; SEQ ID NO 86; 593pp; English.

XX The invention relates to a double-stranded short interfering nucleic acid  
CC (siNA) molecule that down-regulates expression of an endogenous mammalian  
CC target gene comprising one or more chemical modifications and each strand  
CC of the double-stranded siNA comprises about 21 nucleotides. The siNA of  
CC the invention demonstrates antiarteriosclerotic, neuroprotective,  
CC neurotropic, antiparkinsonian and anticonvulsant activities and may be  
CC useful for down-regulating the expression of an endogenous mammalian  
CC target gene and therefore in the treatment of any disease or condition  
CC that responds to modulation of gene expression or activity in a cell,  
CC tissue or organism. The disease or condition may include pulmonary  
CC diseases such as restenosis, atherosclerosis, Alzheimer's disease,  
CC Parkinson's disease, epilepsy, dementia, Huntington's disease or  
CC amyotrophic lateral sclerosis. Furthermore, the siNA may be utilised for  
CC gene therapy applications. The current sequence is that of the siNA  
CC target DNA of the invention.

XX SQ Sequence 23 BP; 2 A; 11 C; 4 G; 0 T; 6 U; 0 Other;

Query Match 5.1%; Score 23; DB 1; Length 23;  
Best Local Similarity 73.9%; Pred. No. 89;  
Matches 17; Conservative 6; Mismatches 0; Indels 0; Gaps 0;

Qy 136 GCCTGCCGCTTCACCGTTCAT 158

|||:|||||:|||||:|||||:|||||

Db 1 GCCUGCGCCUCCACCGUUCAU 23

RESULT 110

ADG29522

ID ADG29522 standard; RNA; 23 BP.

XX AC ADG29522;

XX DT 26-FEB-2004 (first entry)

XX DE hTR siNA-target RNA - SEQ ID 88.

XX double-stranded short interfering nucleic acid; siNA;  
KW antiarteriosclerotic; neuroprotective; neurotropic; antiparkinsonian;  
KW anticonvulsant; pulmonary disease; restenosis; atherosclerosis;  
KW Alzheimer's; Parkinson's; epilepsy; dementia; Huntington's;  
KW amyotrophic lateral sclerosis; gene therapy; target; ss; hTR.

XX OS Unidentified.

XX PN WO2003074654-A2.

XX PD 12-SEP-2003.

XX PF 20-FEB-2003; 2003WO-US005028.

XX PR 20-FEB-2002; 2002US-0358580P.

PR 11-MAR-2002; 2002US-0363124P.

PR 06-JUN-2002; 2002US-0386782P.

PR 29-AUG-2002; 2002US-0406784P.

PR 05-SEP-2002; 2002US-0408378P.

PR 09-SEP-2002; 2002US-0409293P.

PR 15-JAN-2003; 2003US-0440129P.

XX (SIRN-) SIRNA THERAPEUTICS INC.

XX PI Mcawiggen J, Beigelman L, Chowrira B, Pavco P, Fosnaugh K;

PI Jamison S, Usman N, Thompson J;

XX WPI; 2003-731676/69.

XX New double-stranded short interfering nucleic acid molecule, useful for

PT down-regulating the expression of an endogenous mammalian target gene or

PT for treating diseases that respond to modulation of gene expression or

PT activity.

XX

PS Example 24; SEQ ID NO 88; 593pp; English.

XX The invention relates to a double-stranded short interfering nucleic acid

CC (siNA) molecule that down-regulates expression of an endogenous mammalian

CC target gene comprising one or more chemical modifications and each strand

CC of the double-stranded siNA comprises about 21 nucleotides. The siNA of

CC the invention demonstrates antiarteriosclerotic, neuroprotective,

CC neurotropic, antiparkinsonian and anticonvulsant activities and may be

CC useful for down-regulating the expression of an endogenous mammalian

CC target gene and therefore in the treatment of any disease or condition

CC that responds to modulation of gene expression or activity in a cell,

CC tissue or organism. The disease or condition may include pulmonary

CC diseases such as restenosis, atherosclerosis, Alzheimer's disease, or

CC Parkinson's disease, epilepsy, dementia, Huntington's disease or

CC amyotrophic lateral sclerosis. Furthermore, the siNA may be utilized for

CC gene therapy applications. The current sequence is that of the siNA

CC target DNA of the invention.

XX

SQ Sequence 23 BP; 2 A; 8 C; 9 G; 0 T; 4 U; 0 Other;

Query Match 5.1%; Score 23; DB 1; Length 23;

Best Local Similarity 82.6%; Pred. No. 89;

Matches 19; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

QY 395 GCGGCGCGGATTCCTGAGCTG 417

DB 1 GCGGCGCGGAUCCUGAGCUG 23

RESULT 111

ID ADP27908/c

XX ADP27908 standard; DNA; 23 BP.

XX

AC ADP27908;

XX

XX 26-AUG-2004 (first entry)

DT

XX PCR primer to amplify a human cancer prognostic marker DNA SeqID 345.

DE

XX human; primer; PCR; prognostic marker; EGFR;

XX epidermal growth factor receptor; cancer; gene expression profiling;

KW microarray; head and neck cancer; colon cancer; metastatic spread;

KW neoplastic disease; ss.

XX

OS Homo sapiens.

OS

XX WO2004046386-A1.

PN

XX 03-JUN-2004.

PD

XX 14-NOV-2003; 2003WO-US036777.

XX

XX 15-NOV-2002; 2002US-0427090P.

FR

XX (GENO-) GENOMIC HEALTH INC.

PA (VALL-) VALL HEBRON UNIV HOSPITAL.

XX

PI Baker JB, Cronin MT, Shak S, Baselga J;

XX

DR WPI; 2004-420643/39.

XX

XX Prognosing a patient with EGFR-expressing colon cancer comprises

PT subjecting a sample comprising EGFR-expressing cancer cells to

PT quantitative analysis of the expression level of the RNA transcript of at

PT least one gene e.g., CD44v3.

XX

XX Claim 54; SEQ ID NO 345; 113pp; English.

PS

XX This invention relates to a novel method concerning prognostic markers

CC associated with EGFR (epidermal growth factor receptor) positive cancer.

CC Specifically, it refers to a gene expression profiling method that can

CC provide a prediction as to whether a patient is likely to respond well to

CC treatment with an EGFR inhibitor. The present invention describes the

CC quantitative analysis of the expression level of the RNA transcript of at

CC least one gene selected from the group of CD44v3, CD44v6, DR5, CD91,

CC KRT17, LAMC2 or their products thereof. It further provides a cDNA,

CC microarray containing named genes that represent prognostic transcripts

CC which are useful for determining whether a patient diagnosed with an EGFR

CC -expressing head or neck cancer or colon cancer exhibits elevated or

CC decreased expression levels of these genes compared to normal. As such,

CC these methods are also useful for prognosing or predicting the likelihood

CC of cancer-attributable death or progression, including recurrence and

CC metastatic spread of a neoplastic disease, as well as drug resistance.

CC This oligonucleotide sequence is a PCR primer used to amplify a human PCR

CC amplicon DNA sequence used as a prognostic cancer marker, given in an

CC exemplification of the invention.

XX

SQ Sequence 23 BP; 6 A; 9 C; 5 G; 3 T; 0 U; 0 Other;

Query Match 5.1%; Score 23; DB 1; Length 23;

Best Local Similarity 100.0%; Pred. No. 89;

Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 404 GATTCCTGAGCTGTGGGACGTG 426

DB 23 GATTCCTGAGCTGTGGGACGTG 1

RESULT 112

AAZ07300

ID AAZ07300 standard; DNA; 25 BP.

XX

AC AAZ07300;

XX

XX 22-OCT-1999 (first entry)

DT

XX Human telomerase RNA gene (hTR) promoter specific primer h1lc.

DE

XX Telomerase RNA; TR; promoter; cytotoxin; cancer; neoplasia; hTR;

KW gene therapy; thymidine kinase gene; anticancer therapy; human;

KW mutagenesis; PCR primer; ss.

XX

OS Synthetic.

OS

XX Homo sapiens.

XX

PN WO9938964-A2.

XX

XX 05-AUG-1999.

PD

XX 29-JAN-1999; 99WO-GB000308.

PF

XX 29-JAN-1998; 98GB-00001902.

XX

XX (CANC-) CANCER RES CAMPAIGN TECHNOLOGY.

XX

PI Keith WN;

XX

XX WPI; 1999-479183/40.

DR

XX Mouse and human telomerase RNA gene promoters, useful for tumor specific

PT gene therapy.

PT

XX Disclosure; Fig 12; 109pp; English.

PS

XX The invention relates to promoter regions from mouse and human telomerase

CC RNA (TR) component genes. The TR gene promoter can be linked to a

CC heterologous gene, especially a gene encoding a cytotoxin, for therapy of

CC cancer, especially neoplasias. The telomerase is necessary for the

CC unrestricted proliferative capacity of many human cancers. Mutation or

CC dysregulation of the telomerase repression pathway may cause reactivation

CC or upregulation of telomerase expression in cancer. Substances,

CC identified in the methods, can be used to block transcription from the TR

CC gene promoter through interaction of the 5' regulatory sequences. These

CC substances, e.g. antisense oligonucleotides, transcription factors,

CC peptide nucleic acids and factors that disrupt signal transduction, are

CC useful for cancer therapy. In particular, gene therapy vectors



CC (especially pGT62-codApp) comprising the promoter and a viral thymidine  
 CC kinase gene can be used to convert a prodrug, e.g. gancyclovir, so that  
 CC neoplasia can be controlled or treated. Direct down-regulation of  
 CC telomerase RNA gene through manipulation of transcription factors may be  
 CC effective anticancer therapy and the cloning of the hTR gene promoter  
 CC allows the analysis of therapeutic molecules which modulate hTR promoter  
 CC activity. Sequences AA207696-321 represent PCR primers used in cloning  
 CC and mutagenesis of human TR gene (hTR) promoter region  
 XX

SQ Sequence 25 BP; 1 A; 5 C; 15 G; 4 T; 0 U; 0 Other;  
 Query Match 5.1%; Score 23; DB 1; Length 25;  
 Best Local Similarity 100.0%; Pred. No. 1e+02;  
 Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 GGGTTGCGAGGGTGGCGCTGGG 23  
 Db 3 GGGTTGCGAGGGTGGCGCTGGG 25

RESULT 113  
 AAT11045  
 ID AAT11045 standard; DNA; 27 BP.  
 XX  
 AC AAT11045;  
 XX  
 DT 02-JUL-1996 (first entry)  
 XX  
 DE Primer used for producing telomerase probe.  
 XX  
 KW Telomerase; mammal; antisense; triplex forming oligonucleotide; plasmid;  
 KW probe; primer; ribozyme; ss.  
 XX  
 OS Synthetic.  
 XX  
 PN WO9601614-A2.  
 XX  
 PD 25-JAN-1996.  
 XX  
 PF 07-JUL-1995; 95WO-US008620.  
 XX  
 PR 07-JUL-1994; 94US-00272102.  
 PR 27-OCT-1994; 94US-00330123.  
 PR 13-FEB-1995; 95US-00387524.  
 PR 07-JUN-1995; 95US-00485778.  
 XX  
 PA (COLD-) COLD SPRING HARBOR LAB.  
 PA (GERO-) GERON CORP.  
 XX  
 PI Andrews WH, Avillon AA, Feng J, Funk W, Greider C, Marhuenda MA;  
 PI Villeponteau B;  
 XX  
 DR WPI; 1996-097428/10.  
 XX  
 PT RNA components of (non)human mammalian telomerase(s) - useful in studying  
 PT cell senescence and immortalisation.  
 XX  
 PS Example 10; Page 55; 85pp; English.  
 XX  
 CC The RNA components of (non) human mammalian telomerase(s) especially from  
 CC mouse, rat and chinese hamster are all claimed. Antisense  
 CC oligonucleotides can be used to block the activity of the telomerase;  
 CC probes and primers can be used in detection; vectors and host cells  
 CC transformed with the isolated telomerase genes can be used for production  
 CC of telomerase; RNA and DNA ribozymes and triplex forming  
 CC oligonucleotides directed against the telomerase genes can be used  
 CC therapeutically as can plasmids. A mouse which lacks the telomerase gene  
 CC the role it plays in immortalisation. The antisense oligonucleotide is  
 CC synthesised as a 2-O-methyl RNA oligonucleotide and is more resistant to  
 CC hydrolysis than unmodified RNA oligonucleotides (See AAT11032-35)  
 XX

SQ Sequence 22 BP; 3 A; 6 C; 6 G; 0 T; 7 U; 0 Other;  
 Query Match 4.9%; Score 22; DB 1; Length 22;  
 Best Local Similarity 100.0%; Pred. No. 1e+02;  
 Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 46 CTAACCCCTAACTGAGAGGGCG 67  
 Db 22 CTAACCCCTAACTGAGAGGGCG 1

RESULT 114  
 AAT11033/c  
 ID AAT11033 standard; DNA; 22 BP.  
 XX  
 AC AAT11033;  
 XX  
 DT 02-JUL-1996 (first entry)  
 XX  
 DE Antisense oligonucleotide (P3) inhibiting telomerase activity.  
 XX  
 KW Telomerase; mammal; antisense; triplex forming oligonucleotide; plasmid;  
 KW probe; primer; ribozyme; ss.  
 XX  
 OS Synthetic.  
 XX  
 PN WO9601614-A2.  
 XX  
 PD 25-JAN-1996.  
 XX  
 PF 07-JUL-1995; 95WO-US008620.  
 XX  
 PR 07-JUL-1994; 94US-00272102.  
 PR 27-OCT-1994; 94US-00330123.  
 PR 13-FEB-1995; 95US-00387524.  
 PR 07-JUN-1995; 95US-00485778.  
 XX  
 PA (COLD-) COLD SPRING HARBOR LAB.  
 PA (GERO-) GERON CORP.  
 XX  
 PI Andrews WH, Avillon AA, Feng J, Funk W, Greider C, Marhuenda MA;  
 PI Villeponteau B;  
 XX  
 DR WPI; 1996-097428/10.  
 XX  
 PT RNA components of (non)human mammalian telomerase(s) - useful in studying  
 PT cell senescence and immortalisation.  
 XX  
 PS Disclosure; Page 23; 85pp; English.  
 XX  
 CC The RNA components of (non) human mammalian telomerase(s) especially from  
 CC mouse, rat and chinese hamster are all claimed. Antisense  
 CC oligonucleotides can be used to block the activity of the telomerase;  
 CC probes and primers can be used in detection; vectors and host cells  
 CC transformed with the isolated telomerase genes can be used for production  
 CC of telomerase; RNA and DNA ribozymes and triplex forming  
 CC oligonucleotides directed against the telomerase genes can be used  
 CC therapeutically as can plasmids. A mouse which lacks the telomerase gene  
 CC the role it plays in immortalisation. The antisense oligonucleotide is  
 CC synthesised as a 2-O-methyl RNA oligonucleotide and is more resistant to  
 CC hydrolysis than unmodified RNA oligonucleotides (See AAT11032-35)  
 XX

SQ Sequence 22 BP; 3 A; 6 C; 6 G; 0 T; 7 U; 0 Other;  
 Query Match 4.9%; Score 22; DB 1; Length 22;  
 Best Local Similarity 100.0%; Pred. No. 1e+02;  
 Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 46 CTAACCCCTAACTGAGAGGGCG 67  
 Db 22 CTAACCCCTAACTGAGAGGGCG 1

SQ Sequence 27 BP; 2 A; 4 C; 12 G; 9 T; 0 U; 0 Other;  
 Query Match 5.1%; Score 23; DB 1; Length 27;  
 Best Local Similarity 100.0%; Pred. No. 1.1e+02;  
 Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 22 GGAGGGGTGGTGGCCATTTTGG 44  
 Db 5 GGAGGGGTGGTGGCCATTTTGG 27

RESULT 114  
 AAT11033/c  
 ID AAT11033 standard; DNA; 22 BP.  
 XX  
 AC AAT11033;  
 XX  
 DT 02-JUL-1996 (first entry)  
 XX  
 DE Antisense oligonucleotide (P3) inhibiting telomerase activity.  
 XX  
 KW Telomerase; mammal; antisense; triplex forming oligonucleotide; plasmid;  
 KW probe; primer; ribozyme; ss.  
 XX  
 OS Synthetic.  
 XX  
 PN WO9601614-A2.  
 XX  
 PD 25-JAN-1996.  
 XX  
 PF 07-JUL-1995; 95WO-US008620.  
 XX  
 PR 07-JUL-1994; 94US-00272102.  
 PR 27-OCT-1994; 94US-00330123.  
 PR 13-FEB-1995; 95US-00387524.  
 PR 07-JUN-1995; 95US-00485778.  
 XX  
 PA (COLD-) COLD SPRING HARBOR LAB.  
 PA (GERO-) GERON CORP.  
 XX  
 PI Andrews WH, Avillon AA, Feng J, Funk W, Greider C, Marhuenda MA;  
 PI Villeponteau B;  
 XX  
 DR WPI; 1996-097428/10.  
 XX  
 PT RNA components of (non)human mammalian telomerase(s) - useful in studying  
 PT cell senescence and immortalisation.  
 XX  
 PS Disclosure; Page 23; 85pp; English.  
 XX  
 CC The RNA components of (non) human mammalian telomerase(s) especially from  
 CC mouse, rat and chinese hamster are all claimed. Antisense  
 CC oligonucleotides can be used to block the activity of the telomerase;  
 CC probes and primers can be used in detection; vectors and host cells  
 CC transformed with the isolated telomerase genes can be used for production  
 CC of telomerase; RNA and DNA ribozymes and triplex forming  
 CC oligonucleotides directed against the telomerase genes can be used  
 CC therapeutically as can plasmids. A mouse which lacks the telomerase gene  
 CC (also claimed) can be used for study of telomerase regulation in vivo, and  
 CC the role it plays in immortalisation. The antisense oligonucleotide is  
 CC synthesised as a 2-O-methyl RNA oligonucleotide and is more resistant to  
 CC hydrolysis than unmodified RNA oligonucleotides (See AAT11032-35)  
 XX

SQ Sequence 22 BP; 3 A; 6 C; 6 G; 0 T; 7 U; 0 Other;  
 Query Match 4.9%; Score 22; DB 1; Length 22;  
 Best Local Similarity 100.0%; Pred. No. 1e+02;  
 Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 46 CTAACCCCTAACTGAGAGGGCG 67  
 Db 22 CTAACCCCTAACTGAGAGGGCG 1

```
RESULT 115
AAT11034/c
ID AAT11034 standard; DNA; 22 BP.
XX
XX
AC AAT11034;
XX
XX 02-JUL-1996 (first entry)
XX
XX Antisense oligonucleotide (TA3) inhibiting telomerase activity.
DE
XX
XX Telomerase; mammal; antisense; triplex forming oligonucleotide; plasmid;
KW probe; primer; ribozyme; ss.
XX
XX Synthetic.
XX
XX WO9601614-A2.
XX
XX 25-JAN-1996.
XX
XX 07-JUL-1995; 95WO-US008620.
XX
XX 07-JUL-1994; 94US-00272102.
XX 27-OCT-1994; 94US-00330123.
XX 13-FEB-1995; 95US-00387524.
XX 07-JUN-1995; 95US-00485778.
XX
XX (COLD-) COLD SPRING HARBOR LAB.
PA (GERO-) GERON CORP.
XX
XX Andrews WH, Avillon AA, Feng J, Funk W, Greider C, Marhuenda MA,
PI Villeponteau B;
XX
XX WPI; 1996-097428/10.
XX
XX RNA components of (non)human mammalian telomerase(s) - useful in studying
PT cell senescence and immortalisation.
XX
XX Disclosure; Page 23; 85pp; English.
XX
XX The RNA components of (non) human mammalian telomerase(s) especially from
CC mouse, rat and chinese hamster are all claimed. Antisense
CC oligonucleotides can be used to block the activity of the telomerase;
CC probes and primers can be used in detection; vectors and host cells
CC transformed with the isolated telomerase genes can be used for production
CC of telomerases; RNA and DNA ribozymes and triplex forming
CC oligonucleotides directed against the telomerase genes can be used
CC therapeutically as can plasmids. A mouse which lacks the telomerase gene
CC (also claimed) can be used for study of telomere regulation in vivo, and
CC the role it plays in immortalisation. The antisense oligonucleotide is
CC synthesised as a 2-O-methyl RNA oligonucleotide and is more resistant to
CC hydrolysis than unmodified RNA oligonucleotides (See AAT11032-35)
XX
XX Sequence 22 BP; 2 A; 9 C; 5 G; 0 T; 6 U; 0 Other;
SQ
Query Match 4.9%; Score 22; DB 1; Length 22;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 54 AACTGAGAGGGCGTAGCGCC 75
DB 22 AACTGAGAGGGCGTAGCGCC 1
|||||
RESULT 116
AAT10288/c
ID AAT10288 standard; DNA; 22 BP.
XX
XX AAT10288;
XX
XX 09-SEP-1996 (first entry)
XX
XX RNA component of mammalian telomerase antisense oligonucleotide TA3.
DE
Query Match 4.9%; Score 22; DB 1; Length 22;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 54 AACTGAGAGGGCGTAGCGCC 75
DB 22 AACTGAGAGGGCGTAGCGCC 1
|||||
RESULT 117
AAT10287/c
ID AAT10287 standard; DNA; 22 BP.
XX
XX AAT10287;
XX
XX 09-SEP-1996 (first entry)
XX
XX RNA component of mammalian telomerase antisense oligonucleotide P3.
XX
XX RNA component; mammalian; telomerase; antisense oligonucleotide;
KW triple helix; inhibition; neoplastic; cells; activity; ss.
XX
XX Synthetic.
XX
XX WO9601835-A1.
XX
XX 25-JAN-1996.
XX
XX 06-JUL-1995; 95WO-US008530.
XX
XX 07-JUL-1994; 94US-00272102.
XX 27-OCT-1994; 94US-00330123.
XX 07-JUN-1995; 95US-00472802.
XX 07-JUN-1995; 95US-00482115.
XX
XX (GERO-) GERON CORP.
PA
XX Villeponteau B, Feng J, Funk W, Andrews WH;
PI WPI; 1996-097581/10.
XX
XX RNA component of mammalian telomerase, esp. human - useful in identifying
PT e.g. candidate telomerase-modulating agents.
XX
XX Disclosure; Page 38; 114pp; English.
XX
XX The present sequence is a RNA component of mammalian telomerase,
CC antisense oligonucleotide, which can be used, along with triple helix
CC forming sequences, to inhibit telomerase activity in cells, esp.
CC neoplastic cells
XX
XX Sequence 22 BP; 2 A; 9 C; 5 G; 6 T; 0 U; 0 Other;
SQ
Query Match 4.9%; Score 22; DB 1; Length 22;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 54 AACTGAGAGGGCGTAGCGCC 75
DB 22 AACTGAGAGGGCGTAGCGCC 1
|||||
RESULT 118
AAT10287/c
ID AAT10287 standard; DNA; 22 BP.
XX
XX AAT10287;
XX
XX 09-SEP-1996 (first entry)
XX
XX RNA component of mammalian telomerase antisense oligonucleotide P3.
XX
XX RNA component; mammalian; telomerase; antisense oligonucleotide;
KW triple helix; inhibition; neoplastic; cells; activity; ss.
XX
XX Synthetic.
XX
XX WO9601835-A1.
XX
XX 25-JAN-1996.
XX
XX 06-JUL-1995; 95WO-US008530.
XX
XX 07-JUL-1994; 94US-00272102.
XX 27-OCT-1994; 94US-00330123.
XX 07-JUN-1995; 95US-00472802.
XX 07-JUN-1995; 95US-00482115.
XX
XX (GERO-) GERON CORP.
PA
XX Villeponteau B, Feng J, Funk W, Andrews WH;
PI WPI; 1996-097581/10.
XX
XX RNA component of mammalian telomerase, esp. human - useful in identifying
PT e.g. candidate telomerase-modulating agents.
XX
XX Disclosure; Page 38; 114pp; English.
XX
XX The present sequence is a RNA component of mammalian telomerase,
CC antisense oligonucleotide, which can be used, along with triple helix
CC forming sequences, to inhibit telomerase activity in cells, esp.
CC neoplastic cells
XX
XX Sequence 22 BP; 2 A; 9 C; 5 G; 6 T; 0 U; 0 Other;
SQ
Query Match 4.9%; Score 22; DB 1; Length 22;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 54 AACTGAGAGGGCGTAGCGCC 75
DB 22 AACTGAGAGGGCGTAGCGCC 1
|||||
```

XX WPI; 1996-097581/10.  
 XX RNA component of mammalian telomerase, esp. human - useful in identifying  
 XX e.g. candidate telomerase-modulating agents.  
 XX Disclosure; Page 38; 114pp; English.  
 XX The present sequence is a RNA component of mammalian telomerase,  
 CC antisense oligonucleotide, which can be used, along with triple helix  
 CC forming sequences, to inhibit telomerase activity in cells, esp.  
 CC neoplastic cells  
 XX Sequence 22 BP; 3 A; 6 C; 6 G; 7 T; 0 U; 0 Other;  
 SQ

Query Match 4.9%; Score 22; DB 1; Length 22;  
 Best Local Similarity 100.0%; Pred. No. 1e+02;  
 Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 46 CTAACCCCTAACTGAGAGGGCG 67  
 |||||  
 Db 22 CTAACCCCTAACTGAGAGGGCG 1

RESULT 118  
 AAT10308/c  
 ID AAT10308 standard; DNA; 22 BP.  
 XX  
 AC AAT10308;  
 XX  
 DT 10-SEP-1996 (first entry)  
 XX  
 DE RNA component of human telomerase PRINS return primer.  
 XX  
 KW RNA component; human; telomerase; return primer; PRINS;  
 KW recombinant production; synthesis; mutant; detection; mammalian;  
 KW identification; modulating agent; neoplastic condition;  
 KW transcriptional regulatory sequence; gene therapy; disease;  
 KW primed in situ labelling; ss.  
 XX  
 OS Synthetic.  
 XX  
 FN WO9601835-A1.  
 XX  
 PD 25-JAN-1996.  
 XX  
 PF 06-JUL-1995; 95WO-US008530.  
 XX  
 PR 07-JUL-1994; 94US-00272102.  
 PR 27-OCT-1994; 94US-00330123.  
 PR 07-JUN-1995; 95US-00472802.  
 PR 07-JUN-1995; 95US-00482115.  
 XX  
 XX (GERO-) GERON CORP.  
 XX  
 PI Villeponteau B, Feng J, Funk W, Andrews WH;  
 XX  
 XX WPI; 1996-097581/10.  
 XX  
 XX RNA component of mammalian telomerase, esp. human - useful in identifying  
 XX e.g. candidate telomerase-modulating agents.  
 XX  
 XX Example 13; Page 90; 114pp; English.  
 XX  
 XX The present sequence, a return primer for the RNA component of human  
 CC telomerase (RCHT), was used in a primed in situ labelling (PRINS)  
 CC procedure. The RCHT can be used in the recombinant prodn. of an active  
 CC telomerase mol., capable of adding sequences to chromosomal DNA  
 CC telomeres, and in the synthesis of mutant sequences for the detection of  
 CC mutant mammalian telomerase RNA component polynucleotides. The RCHT may  
 CC also be used in the identification of telomerase modulating agents, and  
 CC in the detection of telomerase related, or neoplastic conditions in a  
 CC patient. Polynucleotides of at least 25 consecutive nucleotides

CC identical, or complementary to the RCHT sequence linked to heterologous  
 CC transcriptional regulatory sequences, can be used for the gene therapy of  
 CC human diseases  
 XX  
 SQ Sequence 22 BP; 5 A; 5 C; 12 G; 0 T; 0 U; 0 Other;  
 Query Match 4.9%; Score 22; DB 1; Length 22;  
 Best Local Similarity 100.0%; Pred. No. 1e+02;  
 Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 183 CTGCTGGCCCGTTGCGCCCTCC 204  
 |||||  
 Db 22 CTGCTGGCCCGTTGCGCCCTCC 1

RESULT 119  
 AAT58812/c  
 ID AAT58812 standard; DNA; 22 BP.  
 XX  
 AC AAT58812;  
 XX  
 DT 20-NOV-1997 (first entry)  
 XX  
 DE Human telomerase PCR 3'-primer hal88.  
 XX  
 KW Cancer; eukaryotic parasite; hTR; vertebrate telomerase; yeast; protozoa;  
 KW tumour; antibody; polymerase chain reaction; ss.  
 XX  
 OS Synthetic.  
 XX  
 FN WO9640868-A1.  
 XX  
 PD 19-DEC-1996.  
 XX  
 PF 06-JUN-1996; 96WO-US009517.  
 XX  
 PR 07-JUN-1995; 95US-00478352.  
 XX  
 XX (COLD-) COLD SPRING HARBOR LAB.  
 XX  
 XX Greider C, Autexier C;  
 XX  
 XX WPI; 1997-099928/09.  
 XX  
 XX DNA encoding essential RNA components of human telomerase - also  
 PT truncated or recombinant telomerase, useful for diagnosis and treatment  
 PT of cancer and infection by eukaryotic parasites.  
 XX  
 XX Example 5; Page 32; 48pp; English.  
 XX  
 XX The present sequence represents PCR 3'-primer hal88 used for amplifying  
 CC the human telomerase (hTR). The RNA and DNA can be used in hybridisation  
 CC assays to detect or quantify telomerase activity in cells, tissue or  
 CC fluid samples, e.g. for diagnosis of eukaryotic parasites (yeast and  
 CC protozoa) or tumours. It is also useful as primers for amplification  
 CC assays. The truncated or recombinant vertebrate telomerase is used  
 CC therapeutically to increase telomerase activity (also as reagents in the  
 CC screening assay) while the RNA or other inhibitors such as antisense  
 CC molecules, are used to reduce such activity. Typical applications are  
 CC initiation/restoration of activity to cause senescence or to prevent  
 CC immortalisation of cells in tumours or parasites. The DNA is also used to  
 CC produce recombinant telomerase, which can then be used conventionally to  
 CC raise antibodies for diagnostic detection of telomerase. Detecting  
 CC telomerase allows early diagnosis of tumour or infection, before clinical  
 CC signs manifest. Telomerase inhibitors directed against e.g. Trypanosoma  
 CC should cause fewer side effects than drugs currently used to treat such  
 CC infections. The DNA encodes those parts of hTR RNA essential for activity  
 CC but are significantly shorter than the endogenous RNA component  
 XX  
 SQ Sequence 22 BP; 3 A; 4 C; 4 G; 11 T; 0 U; 0 Other;  
 Query Match 4.9%; Score 22; DB 1; Length 22;  
 Best Local Similarity 100.0%; Pred. No. 1e+02;

Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 163 GAGCAACAAATAATGTCAGCT 184  
 DB 22 GAGCAACAAATAATGTCAGCT 1

RESULT 120  
 AAV63646/C  
 ID AAV63646 standard; DNA; 22 BP.  
 XX AC AAV63646;  
 XX 15-FEB-1999 (first entry)  
 DT Antisense oligonucleotide P3 for human telomerase RNA component.  
 DE Human; telomerase RNA component; anticancer therapy; purification; assay;  
 KW vaccine; cancer; antisense oligonucleotide; ss.  
 XX Synthetic.  
 OS Homo sapiens.  
 XX Key modified\_base 1 Location/Qualifiers  
 FT /\*tag= a  
 FT /note= "biotinylated"  
 XX W09845450-A1.  
 XX 15-OCT-1998.  
 XX 04-APR-1997; 97WO-US006012.  
 XX 04-APR-1997; 97WO-US006012.  
 XX (GERO-) GERON CORP.  
 XX Weinrich SL, Atkinson EM, Lichtsteiner SP, Vasserot AP, Pruzan RA;  
 PI Kealey JT;  
 XX WPI; 1998-594485/50.  
 XX Purification of telomerase on affinity material - useful for, e.g.  
 XX diagnosis and treatment of cancer.  
 XX Disclosure; Page 24; 76pp; English.  
 XX The present sequence represents an antisense oligonucleotide directed  
 CC against the human telomerase RNA component gene sequences. The  
 CC oligonucleotide can be used as an affinity agent in the methods of the  
 CC invention, which are used to purify human telomerase. The methods involve  
 CC the use of several sequential steps, including the use of two matrices  
 CC that bind molecules bearing negative charges, a matrix that binds  
 CC molecules bearing positive charges, an affinity purification step and a  
 CC size separation. Telomerase is a particular target of anticancer  
 CC therapies, and is useful in assays for characterizing (pre)cancerous  
 CC cells. Telomerase can also be used to screen for specific modulators, for  
 CC biochemical analysis of its activity, and in preparation of antibodies.  
 CC Fragments of telomerase, or nucleic acid encoding them, are used in  
 CC vaccines, and for treating over expression of telomerase, particularly in  
 CC cancer  
 XX Sequence 22 BP; 3 A; 6 C; 6 G; 7 T; 0 U; 0 Other;  
 Query Match 4.9%; Score 22; DB 1; Length 22;  
 Best Local Similarity 100.0%; Pred. No. 1e+02;  
 Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 46 CTAACCCCTAACTGAGAAGGGCG 67  
 DB 22 CTAACCCCTAACTGAGAAGGGCG 1

RESULT 121  
 AAZ23628/c  
 ID AAZ23628 standard; DNA; 22 BP.  
 XX AC AAZ23628;  
 XX 07-JAN-2000 (first entry)  
 DT Human clone 28-1 telomerase oligonucleotide oligo-P3.  
 DE Telomerase; human; immune response; cancer; vaccine; treatment; disease;  
 KW primer; ss.  
 XX Synthetic.  
 OS Homo sapiens.  
 XX Key modified\_base 1 Location/Qualifiers  
 FT /\*tag= a  
 FT /note= "5'-biotinylated cytidine"  
 XX US5968506-A.  
 XX 19-OCT-1999.  
 XX 04-APR-1997; 97US-00833377.  
 XX 04-AUG-1995; 95US-00510736.  
 XX (GERO-) GERON CORP.  
 XX Atkinson EM, Lichtsteiner SP, Weinrich SL, Pruzan RA, Kealey JT;  
 PI Vasserot AP;  
 XX WPI; 1999-590379/50.  
 XX Compositions comprising human telomerase, useful for treating diseases  
 PT associated with overexpression of telomerase e.g. cancer.  
 XX Disclosure; Col 43-44; 34pp; English.  
 XX This invention describes a novel composition comprising human telomerase  
 CC having at least 2000-fold (preferably at least 6000-fold) increased  
 CC relative purity compared with crude extract of cells from adenovirus-  
 CC transformed kidney cell line. The composition is useful for eliciting an  
 CC immune response in animals and may therefore be used as a vaccine for  
 CC treating diseases associated with the overexpression of telomerase e.g.  
 CC cancer. AAZ23626-223637 represent oligonucleotides used in the isolation  
 CC of human clone 28-1 which contains a fragment of the human telomerase  
 CC described in the method of the invention  
 XX Sequence 22 BP; 3 A; 6 C; 6 G; 7 T; 0 U; 0 Other;  
 Query Match 4.9%; Score 22; DB 1; Length 22;  
 Best Local Similarity 100.0%; Pred. No. 1e+02;  
 Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 46 CTAACCCCTAACTGAGAAGGGCG 67  
 DB 22 CTAACCCCTAACTGAGAAGGGCG 1

RESULT 122  
 AAS09473/c  
 ID AAS09473 standard; DNA; 22 BP.  
 XX AC AAS09473;  
 XX 24-OCT-2001 (first entry)  
 DT Antisense oligonucleotide for human telomerase, BIOTIN P3.  
 XX DE  
 XX

KW Human; Telomerase; vaccine; antibody; cancer; EF2H; nucleolin;  
 KW antisense oligonucleotide; BIOTIN P3; ss.

OS Homo sapiens.

XX Key Location/Qualifiers  
 XX modified\_base 1 /\*tag= a  
 FT /mod\_base= C  
 FT /note= "C is biotinylated"

XX USG261556-B1.

XX 17-JUL-2001.

XX 18-OCT-1999; 99US-00420056.

XX 04-AUG-1995; 95US-00510736.

XX 04-APR-1997; 97US-00833377.

XX (GERO-) GERON CORP.

XX Weinrich SL, Atkinson EM, Lichtsteiner SP, Vasserot AP, Pruzan RA;  
 PI Kealey JT;

XX WPI; 2001-450477/48.

XX Purified human telomerase, useful for inducing immune response in  
 PT animals, comprises several thousand folds increased purity compared with  
 PT cytoplasmic crude cell preparations.

PS Disclosure; Col 18; 29pp; English.

XX The sequence represents a biotinylated antisense oligonucleotide used in  
 CC the purification of human telomerase. The invention relates to a purified  
 CC human telomerase core enzyme protein comprising 2000-fold increased  
 CC purity compared with a crude extract of cells from adenovirus-transformed  
 CC kidney cell line (293 cells) and when associated with telomerase RNA  
 CC component has DNA polymerase activity and a molecular weight of 200-2000  
 CC kilo Daltons (kDa). The purified telomerase is useful for inducing a  
 CC humoral or cell-mediated immune response in an animal. Purified  
 CC telomerase or immunogenic fragments are useful as vaccines for treating  
 CC diseases associated with over-expression of telomerase, such as cancer  
 CC and for producing antibodies that recognize telomerase, which are useful  
 CC as affinity agents in isolating the proteins and for detecting the  
 CC presence of proteins in a sample, such as cell or tissue. Identification  
 CC of telomerase aids in diagnosis of cancer or pre-cancerous states.  
 CC Telomerase and/or telomerase associated proteins are also useful for  
 CC screening compounds to identify agents that alter the association of  
 CC telomerase-associated proteins, such as nucleolin or EF2H with telomerase

XX Sequence 22 BP; 3 A; 6 C; 6 G; 7 T; 0 U; 0 Other;

Query Match 4.9%; Score 22; DB 1; Length 22;  
 Best Local Similarity 100.0%; Pred. No. 1e+02;  
 Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 46 CTAACCCCTAACTGAGAGGGCG 67  
 |||||  
 Db 22 CTAACCCCTAACTGAGAGGGCG 1

RESULT 123

ACC57544/c

ID ACC57544 standard; DNA; 22 BP.

XX ACC57544;

XX 28-JUL-2003 (first entry)

XX Telomerase PCR primer.

XX Telomerase; enzyme; RNA interference; short interfering RNA; siRNA;

KW cancer; tumour; cytostatic; contraceptive; immunosuppressive;  
 KW antiinfertility; fungicide; antiparasitic; antiinflammatory; human;  
 KW gene therapy; PCR; primer; ss.

OS Homo sapiens.

XX WO2003034985-A2.

XX 01-MAY-2003.

XX 16-OCT-2002; 2002WO-US033146.

XX 22-OCT-2001; 2001US-0345326P.

XX 20-FEB-2002; 2002US-0359196P.

XX 22-MAY-2002; 2002US-0383195P.

XX (UVRP ) UNIV ROCHESTER.

XX Rowley PT;

XX WPI; 2003-403289/38.

XX Novel nucleic acid encoding or comprising interfering RNAs which target  
 PT telomerase RNA, useful for inhibiting telomerase activity for treating  
 PT cancer, infertility and disorders of the immune system.

XX Example 2; Page 27; 52pp; English.

XX The present sequence is a PCR primer used for RT-PCR quantitation of  
 CC telomerase RNA (see also ACC57551). The invention relates to the  
 CC discovery that double-stranded interfering RNAs, such as short  
 CC interfering RNAs (siRNA), which target telomerase RNA or telomerase  
 CC reverse transcriptase (TERT) mRNA, are capable of inhibiting telomerase  
 CC activity. In cancer cells, inhibition of telomerase leads to telomere  
 CC shortening, end-to-end chromosomal fusion, and apoptosis. Telomerase  
 CC inhibition can also be used for treatment of infertility, for  
 CC contraception or sterilisation, for immunosuppression, for treatment of  
 CC yeast, parasite and fungal infections, and in antiinflammatory therapies

XX Sequence 22 BP; 6 A; 7 C; 7 G; 2 T; 0 U; 0 Other;

Query Match 4.9%; Score 22; DB 1; Length 22;  
 Best Local Similarity 100.0%; Pred. No. 1e+02;  
 Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 176 ATGTCAGCTGCTGCCCGTTTCG 197  
 |||||

Db 22 ATGTCAGCTGCTGCCCGTTTCG 1

RESULT 124

ACC57543

ID ACC57543 standard; DNA; 22 BP.

XX ACC57543;

XX 28-JUL-2003 (first entry)

XX Telomerase PCR primer.

XX Telomerase; enzyme; RNA interference; short interfering RNA; siRNA;  
 KW cancer; tumour; cytostatic; contraceptive; immunosuppressive;  
 KW antiinfertility; fungicide; antiparasitic; antiinflammatory; human;  
 KW gene therapy; PCR; primer; ss.

OS Homo sapiens.

XX WO2003034985-A2.

XX 01-MAY-2003.

XX 16-OCT-2002; 2002WO-US033146.

XX



CC The invention describes a method of obtaining mammalian telomerase  
CC protein (I). The method involves preparing enriched solution (ES) from a  
CC cell expressing telomerase where the component of (I) in ES is separated  
CC from other proteins expressed by cell by combining ES with  
CC oligonucleotide (O) having specific affinity for (I), and collecting  
CC protein bound to (O). The oligonucleotide comprises a retrievable label  
CC such as biotin and contains a sequence that is specifically recognized by  
CC telomerase protein. The oligonucleotide contains or does not contain the  
CC sequence (TTAGGG)<sub>3</sub>. The method further comprises combining a fraction  
CC containing telomerase protein with an anion exchange matrix, and  
CC collecting protein that binds the matrix, combining a fraction containing  
CC telomerase protein with a cation exchange matrix (such as a heparin  
CC matrix), and collecting protein that binds the matrix. The method  
CC comprises successively enriching fractions containing telomerase protein  
CC on several different ion exchange matrices and combining a fraction  
CC containing telomerase protein with an intermediate selectivity matrix,  
CC collecting protein that binds the matrix, where the intermediate  
CC selectivity matrix and separating a fraction containing the telomerase  
CC protein by gel filtration chromatography or gradient centrifugation. The  
CC telomerase is enriched from an extract of cells stably expressing  
CC telomerase. This sequence represents an antisense oligonucleotide to the  
CC RNA component of human telomerase that can be used in the purification  
CC method of the invention.

SQ Sequence 22 BP; 3 A; 6 C; 6 G; 7 T; 0 U; 0 Other;

Query Match 4.9%; Score 22; DB 1; Length 22;  
Best Local Similarity 100.0%; Pred. No. 1e+02;  
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 46 CTAACCCCTAACTGAGAGGGCG 67  
Db 22 CTAACCCCTAACTGAGAGGGCG 1

RESULT 127  
ADG62871/C

ID ADG62871 standard; DNA; 22 BP.

XX AC ADG62871;

XX DT 11-MAR-2004 (first entry)

XX DE Human telomerase RNA antisense oligonucleotide, P3.

XX KW Telomerase activity; therapy; cancer; cytostatic; antisense; ss.

XX OS Homo sapiens.

XX FH Key Location/Qualifiers

FT modified\_base 1 /tag= a  
FT /mod\_base= OTHER  
FT /note= "Biotin labelled"

XX US2003186282-A1.

XX PD 02-OCT-2003.

XX PF 24-DEC-2002; 2002US-00330872.

XX PR 04-AUG-1995; 95US-00510736.

XX PR 04-APR-1997; 97US-00833377.

XX PR 18-OCT-1999; 99US-00420056.

XX PR 20-NOV-2000; 2000US-00717828.

XX (WEIN/) WEINRICH S L.

XX (ATKI/) ATKINSON E M.

XX (LICH/) LICHTSTEINER S P.

XX (VASS/) VASSEROT A P.

XX (PRUZ/) PRUZAN R A.

PI Weinrich SL, Atkinson EM, Lichtsteiner SP, Vasserot AP, Pruzan RA;

XX WPI; 2003-811733/76.

XX DR Identifying telomerase regulators useful for treating cancer.

XX PT Disclosure; SEQ ID NO 2; 22pp; English.

XX PS The invention relates to a method for identifying regulators of  
XX telomerase activity that may be useful for treating cancers. The method  
XX may be used to identify regulators e.g. antibodies, of telomerase  
XX activity which may be useful as cancer treatments. It has been found that  
XX found that the cells of many human cancers have telomerase activity. This  
XX helps explain why cancer cells continue dividing without becoming  
XX senescent. If telomerase activity in cancer cells can be inhibited, the  
XX cancer cells are expected to reach senescence and cease dividing. The  
XX present sequence is human telomerase antisense oligonucleotide used to  
XX illustrate the method of the invention.

SQ Sequence 22 BP; 3 A; 6 C; 6 G; 7 T; 0 U; 0 Other;

Query Match 4.9%; Score 22; DB 1; Length 22;  
Best Local Similarity 100.0%; Pred. No. 1e+02;  
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 46 CTAACCCCTAACTGAGAGGGCG 67  
Db 22 CTAACCCCTAACTGAGAGGGCG 1

RESULT 128  
ACCS8032/C

ID ACCS8032 standard; DNA; 22 BP.

XX AC ACCS8032;

XX DT 11-AUG-2003 (first entry)

XX DE Telomerase PCR primer.

XX KW Telomerase; enzyme; RNA interference; short interfering RNA; siRNA;  
XX KW telomerase; cancer; tumour; cytostatic; contraceptive; immunosuppressive;  
XX KW antiinfertility; fungicide; antiparasitic; antiinflammatory; human;  
XX KW gene therapy; PCR; primer; ss.

XX OS Synthetic.

XX PN WO2003035667-A2.

XX PD 01-MAY-2003.

XX PF 16-OCT-2002; 2002WO-US033065.

XX PR 22-OCT-2001; 2001US-0345326P.

XX PR 20-FEB-2002; 2002US-0359196P.

XX PR 22-MAY-2002; 2002US-0383195P.

XX PA (UYRP ) UNIV ROCHESTER.

XX PI Rowley PT;

XX DR WPI; 2003-403336/38.

XX Novel double-stranded short interfering RNA having sense and antisense  
XX nucleic acids which are complementary to each other and to target nucleic  
XX acid e.g., telomerase RNA or mRNA encoding telomerase reverse  
XX transcriptase.

XX Example 2; Page 24; 37pp; English.

XX The present sequence is a PCR primer used for RT-PCR quantitation of  
XX telomerase RNA (see also ACCS8040). The invention relates to the  
XX discovery that double-stranded interfering RNAs, such as short  
XX interfering RNAs (siRNA), which target telomerase RNA or telomerase

CC reverse transcriptase (TERT) mRNA, are capable of inhibiting telomerase  
CC activity. In cancer cells, inhibition of telomerase leads to telomere  
CC shortening, end-to-end chromosomal fusion, and apoptosis. Telomerase  
CC inhibition can also be used for treatment of infertility, for  
CC contraception or sterilisation, for immunosuppression, for treatment of  
CC yeast, parasite and fungal infections, and in antiinflammatory therapies  
XX

SQ Sequence 22 BP; 6 A; 7 C; 7 G; 2 T; 0 U; 0 Other;

Query Match 4.9%; Score 22; DB 1; Length 22;  
Best Local Similarity 100.0%; Pred. No. 1e+02;  
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 176 ATGTCAGCTGCTGGCCGCTTCG 197  
|||||  
DB 22 ATGTCAGCTGCTGGCCGCTTCG 1

## RESULT 129

ACC58031

ID ACC58031 standard; DNA; 22 BP.

XX AC ACC58031;

DT 11-AUG-2003 (first entry)

XX DE Telomerase PCR primer.

XX KW Telomerase; enzyme; RNA interference; short interfering RNA; siRNA;  
KW telomerase; cancer; tumour; cytostatic; contraceptive; immunosuppressive;  
KW antinfertility; fungicide; antiparasitic; antiinflammatory; human;  
KW gene therapy; PCR; primer; ss.

XX OS Homo sapiens.

XX PN WO2003035667-A2.

XX PD 01-MAY-2003.

XX PF 16-OCT-2002; 2002WO-US033065.

XX PR 22-OCT-2001; 2001US-0345326P.

XX PR 20-FEB-2002; 2002US-0359196P.

XX PR 22-MAY-2002; 2002US-0383195P.

XX PA (UYRP ) UNIV ROCHESTER.

XX PI Rowley PT;

XX WPI; 2003-403336/38.

XX Novel double-stranded short interfering RNA having sense and antisense  
XX nucleic acids which are complementary to each other and to target nucleic  
XX acid e.g., telomerase RNA or mRNA encoding telomerase reverse  
XX transcriptase.

XX Example 2; Page 24; 37pp; English.

XX The present sequence is a PCR primer used for RT-PCR quantitation of  
XX telomerase RNA (see also ACC58040). The invention relates to the  
XX discovery that double-stranded interfering RNAs, such as short  
XX interfering RNAs (siRNA), which target telomerase RNA or telomerase  
XX reverse transcriptase (TERT) mRNA, are capable of inhibiting telomerase  
XX activity. In cancer cells, inhibition of telomerase leads to telomere  
XX shortening, end-to-end chromosomal fusion, and apoptosis. Telomerase  
XX inhibition can also be used for treatment of infertility, for  
XX contraception or sterilisation, for immunosuppression, for treatment of  
XX yeast, parasite and fungal infections, and in antiinflammatory therapies  
XX

SQ Sequence 22 BP; 2 A; 3 C; 11 G; 6 T; 0 U; 0 Other;

Query Match 4.9%; Score 22; DB 1; Length 22;  
Best Local Similarity 100.0%; Pred. No. 1e+02;

Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 19 CTGGGAGGGTGTGGCCATT 40  
|||||  
DB 1 CTGGGAGGGTGTGGCCATT 22

## RESULT 130

AAT11058/c

ID AAT11058 standard; DNA; 21 BP.

XX AC AAT11058;

DT 02-JUL-1996 (first entry)

XX DE Primer used for amplifying telomerase RNA fragments.

XX KW Telomerase; mammal; antisense; triplex forming oligonucleotide; plasmid;  
KW probe; primer; ribozyme; ss.

XX OS Synthetic.

XX PN WO9601614-A2.

XX PD 25-JAN-1996.

XX PF 07-JUL-1995; 95WO-US008620.

XX PR 07-JUL-1994; 94US-00272102.

XX PR 27-OCT-1994; 94US-00330123.

XX PR 13-FEB-1995; 95US-00387524.

XX PR 07-JUN-1995; 95US-00485778.

XX PA (COLD-) COLD SPRING HARBOR LAB.

XX PI (GERO-) GERON CORP.

XX PI Andrews WH, Avillion AA, Feng J, Funk W, Greider C, Marhuenda MA;

XX PI Villeponteau B;

XX WPI; 1996-097428/10.

XX RNA components of (non)human mammalian telomerase(s) - useful in studying  
XX cell senescence and immortalisation.  
XX Example 15; Page 59; 85pp; English.

XX The RNA components of (non) human mammalian telomerase(s) especially from  
XX mouse, rat and chinese hamster are all claimed. Antisense  
XX oligonucleotides can be used to block the activity of the telomerase;  
XX probes and primers can be used in detection; vectors and host cells  
XX transformed with the isolated telomerase genes can be used for production  
XX of telomerases; RNA and DNA ribozymes and triplex forming  
XX oligonucleotides directed against the telomerase genes can be used  
XX therapeutically as can plasmids. A mouse which lacks the telomerase gene  
XX (also claimed) can be used for study of telomere regulation in vivo, and  
XX the role it plays in immortalisation. Four primers (AAT11057, AAT11058  
XX and AAT11059, AAT11060) which are complementary to human telomerase RNA  
XX component sequences can be used to identify and amplify homologous  
XX sequences from other non-human mammals. The amplified fragments can then  
XX be used as probes to identify telomerase genes

SQ Sequence 21 BP; 5 A; 5 C; 11 G; 0 T; 0 U; 0 Other;

Query Match 4.7%; Score 21; DB 1; Length 21;  
Best Local Similarity 100.0%; Pred. No. 1.2e+02;

Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 184 TGCTGGCCCGTTCGCCCTCC 204  
|||||

DB 21 TGCTGGCCCGTTCGCCCTCC 1

## RESULT 131





OS	Homo sapiens.	KW	Cytostatic; vasotropic; protozoacide; immunosuppressive; dermatological;
XX		KW	neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;
PN	WO2003070742-A1.	KW	antiarthritic; antiinflammatory; gene therapy; telomerase; human; terc;
XX		KW	RNA interference; short interfering nucleic acid; siNA;
PD	28-AUG-2003.	KW	short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;
XX		KW	short hairpin RNA; shRNA; expression modulation; gene therapy;
PF	11-FEB-2003; 2003WO-US004088.	KW	drug screening; diagnosis; therapeutic target identification;
XX		KW	pharmacogenomics; gene function analysis; gene mapping; TERC; ss.
PR	20-FEB-2002; 2002US-0358580P.	XX	Synthetic.
PR	11-MAR-2002; 2002US-0363124P.	OS	Homo sapiens.
PR	06-JUN-2002; 2002US-0386782P.	XX	
PR	17-JUL-2002; 2002US-0396600P.	PN	WO2003070742-A1.
PR	29-AUG-2002; 2002US-0406784P.	XX	
PR	05-SEP-2002; 2002US-0408378P.	PD	28-AUG-2003.
PR	09-SEP-2002; 2002US-0409293P.	XX	
PR	15-JAN-2003; 2003US-0440129P.	XX	
XX		PF	11-FEB-2003; 2003WO-US004088.
PA	(RIBO-) RIBOZYME PHARM INC.	XX	
XX		PR	20-FEB-2002; 2002US-0358580P.
PI	Mcswiggen J, Beigelman L;	PR	11-MAR-2002; 2002US-0363124P.
XX		PR	06-JUN-2002; 2002US-0386782P.
DR	WPI; 2003-689777/65.	PR	17-JUL-2002; 2002US-0396600P.
XX		PR	29-AUG-2002; 2002US-0406784P.
XX		PR	05-SEP-2002; 2002US-0408378P.
PT	New short interfering nucleic acid downregulates expression of the	PR	09-SEP-2002; 2002US-0409293P.
PT	telomerase gene useful e.g. for treatment and diagnosis of cancer.	PR	15-JAN-2003; 2003US-0440129P.
XX		XX	
PS	Example 3; SEQ ID NO 589; 145pp; English.	PA	(RIBO-) RIBOZYME PHARM INC.
XX		XX	
CC	The invention relates to short interfering nucleic acids (siNA) which	PI	Mcswiggen J, Beigelman L;
CC	downregulate expression of the one or more telomerase genes by RNA	XX	
CC	interference. The siNAs may or may not comprise ribonucleotides and may	XX	
CC	be double or single stranded. They further comprise sense and antisense	DR	WPI; 2003-689777/65.
CC	regions, or alternatively are assembled from a sense oligonucleotide and	XX	
CC	an antisense oligonucleotide. Specifically, the siNAs include short	XX	
CC	interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short	CC	New short interfering nucleic acid downregulates expression of the
CC	hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,	CC	telomerase gene useful e.g. for treatment and diagnosis of cancer.
CC	and contain deoxyribonucleotides, and can be chemically synthesised,	XX	
CC	expressed from a vector or enzymatically synthesised. The invention also	PS	Example 3; SEQ ID NO 589; 145pp; English.
CC	relates to kits for the in vitro or in vivo delivery of siNA; conjugates	XX	
CC	and/or complexes of siNA; and vectors that express siNA. The siNAs are	XX	
CC	used to modulate expression of the telomerase genes in cells, tissue	CC	The invention relates to short interfering nucleic acids (siNA) which
CC	explants or organisms (e.g., by ex vivo gene therapy), or in grafts and	CC	downregulate expression of the one or more telomerase genes by RNA
CC	transplants for the treatment of a variety of conditions. They may be	CC	interference. The siNAs may or may not comprise ribonucleotides and may
CC	used for treating cancer, restenosis, infectious diseases (specifically	CC	be double or single stranded. They further comprise sense and antisense
CC	protozoal), transplant rejection, or autoimmune or age-related diseases,	CC	regions, or alternatively are assembled from a sense oligonucleotide and
CC	e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,	CC	an antisense oligonucleotide. Specifically, the siNAs include short
CC	skin ulcers and rheumatoid arthritis. The siNAs are also useful for drug	CC	interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short
CC	screening, diagnosis, therapeutic target identification and validation,	CC	hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,
CC	genetic engineering, pharmacogenomics, studying gene function, and gene	CC	and contain deoxyribonucleotides, and can be chemically synthesised,
CC	mapping (e.g., of single nucleotide polymorphisms). The present sequence	CC	expressed from a vector or enzymatically synthesised. The invention also
CC	represents a siRNA targeted to the human TERT mRNA transcript.	CC	relates to kits for the in vitro or in vivo delivery of siNA; conjugates
XX		CC	and/or complexes of siNA; and vectors that express siNA. The siNAs are
SQ	Sequence 21 BP; 2 A; 7 C; 8 G; 0 T; 4 U; 0 Other;	CC	used to modulate expression of the telomerase genes in cells, tissue
		CC	explants or organisms (e.g., by ex vivo gene therapy), or in grafts and
		CC	transplants for the treatment of a variety of conditions. They may be
		CC	used for treating cancer, restenosis, infectious diseases (specifically
		CC	protozoal), transplant rejection, or autoimmune or age-related diseases,
		CC	e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,
		CC	skin ulcers and rheumatoid arthritis. The siNAs are also useful for drug
		CC	screening, diagnosis, therapeutic target identification and validation,
		CC	genetic engineering, pharmacogenomics, studying gene function, and gene
		CC	mapping (e.g., of single nucleotide polymorphisms). The present sequence
		CC	represents a siRNA targeted to the human TERT mRNA transcript.
		XX	
		SQ	Sequence 21 BP; 2 A; 7 C; 8 G; 0 T; 4 U; 0 Other;
		Query Match	4.7%; Score 21; DB 1; Length 21;
		Best Local Similarity	81.0%; Pred. No. 1.2e+02;
		Matches 17; Conservative	4; Mismatches 0; Indels 0; Gaps 0;
QY	397 GCGGCGCGATTCCCTGAGCTG 417		
DB	1 GCGGCGCGAUCUCCUGAGCUG 21		
		RESULT 134	
		ADF93867/C	
ID	ADF93867 standard; RNA; 21 BP.		
XX			
AC	ADF93867;		
XX			
DT	26-FEB-2004 (first entry)		
XX			
DE	Human TERT siRNA, SEQ ID 594.		
XX			

Query Match 4.7%; Score 21; DB 1; Length 21;  
Best Local Similarity 100.0%; Pred. No. 1.2e+02;  
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 395 GCGGCGCGATTCCCTGAGC 415  
DB 21 GCGGCGCGATTCCCTGAGC 1

```
RESULT 135
ADF93860
ID ADF93860 standard; RNA; 21 BP.
XX
AC ADF93860;
XX
DT 26-FEB-2004 (first entry)
XX
DE Human TERT siRNA, SEQ ID 587.
XX
XX Cytostatic; vasotropic; protozoicide; immunosuppressive; dermatological;
KW neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;
KW antiarthritic; antiinflammatory; gene therapy; telomerase; human; terc;
KW RNA interference; short interfering nucleic acid; siRNA;
KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;
KW short hairpin RNA; shRNA; expression modulation; gene therapy;
KW drug screening; diagnosis; therapeutic target identification;
KW pharmacogenomics; gene function analysis; gene mapping; TERC; TERT; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
PN WO2003070742-A1.
XX
PD 28-AUG-2003.
XX
PF 11-FEB-2003; 2003WO-US004088.
XX
PR 20-FEB-2002; 2002US-0358580P.
PR 11-MAR-2002; 2002US-0363124P.
PR 06-JUN-2002; 2002US-0386782P.
PR 17-JUL-2002; 2002US-0396600P.
PR 29-AUG-2002; 2002US-0406784P.
PR 05-SEP-2002; 2002US-0408378P.
PR 09-SEP-2002; 2002US-0409293P.
PR 15-JAN-2003; 2003US-0440129P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Mcswiggen J, Beigelman L;
XX
DR WPT; 2003-689777/65.
XX
XX New short interfering nucleic acid downregulates expression of the
PT telomerase gene useful e.g. for treatment and diagnosis of cancer.
XX
PS Example 3; SEQ ID NO 587; 145pp; English.
XX
CC The invention relates to short interfering nucleic acids (siNA) which
CC downregulate expression of the one or more telomerase genes by RNA
CC interference. The siNAs may or may not comprise ribonucleotides and may
CC be double or single stranded. They further comprise sense and antisense
CC regions, or alternatively are assembled from a sense oligonucleotide and
CC an antisense oligonucleotide. Specifically, the siNAs include short
CC interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short
CC hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,
CC can contain deoxyribonucleotides, and can be chemically synthesised,
CC expressed from a vector or enzymatically synthesised. The invention also
CC relates to kits for the in vitro or in vivo delivery of siNA; conjugates
CC and/or complexes of siNA; and vectors that express siNA. The siNAs are
CC used to modulate expression of the telomerase genes in cells, tissue
CC explants or organisms (e.g., by ex vivo gene therapy), or in grafts and
CC transplants for the treatment of a variety of conditions. They may be
CC
XX Sequence 21 BP; 2 A; 10 C; 3 G; 0 T; 6 U; 0 Other;
```

```
Query Match 4.7%; Score 21; DB 1; Length 21;
Best Local Similarity 71.4%; Pred. No. 1.2e+02;
Matches 15; Conservative 6; Mismatches 0; Indels 0; Gaps 0;

QY 138 CTGCGCGCTTCCACCGTTTCAT 158
DQ 1 CUGCCGCCUCCACCGUUCAU 21

RESULT 136
ADF93864/c
ID ADF93864 standard; RNA; 21 BP.
XX
AC ADF93864;
XX
DT 26-FEB-2004 (first entry)
XX
DE Human TERT siRNA, SEQ ID 591.
XX
XX Cytostatic; vasotropic; protozoicide; immunosuppressive; dermatological;
KW neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;
KW antiarthritic; antiinflammatory; gene therapy; telomerase; human; terc;
KW RNA interference; short interfering nucleic acid; siNA;
KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;
KW short hairpin RNA; shRNA; expression modulation; gene therapy;
KW drug screening; diagnosis; therapeutic target identification;
KW pharmacogenomics; gene function analysis; gene mapping; TERC; TERT; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
PN WO2003070742-A1.
XX
PD 28-AUG-2003.
XX
PF 11-FEB-2003; 2003WO-US004088.
XX
PR 20-FEB-2002; 2002US-0358580P.
PR 11-MAR-2002; 2002US-0363124P.
PR 06-JUN-2002; 2002US-0386782P.
PR 17-JUL-2002; 2002US-0396600P.
PR 29-AUG-2002; 2002US-0406784P.
PR 05-SEP-2002; 2002US-0408378P.
PR 09-SEP-2002; 2002US-0409293P.
PR 15-JAN-2003; 2003US-0440129P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Mcswiggen J, Beigelman L;
XX
DR WPI; 2003-689777/65.
XX
XX New short interfering nucleic acid downregulates expression of the
PT telomerase gene useful e.g. for treatment and diagnosis of cancer.
XX
PS Example 3; SEQ ID NO 591; 145pp; English.
XX
CC The invention relates to short interfering nucleic acids (siNA) which
CC downregulate expression of the one or more telomerase genes by RNA
CC interference. The siNAs may or may not comprise ribonucleotides and may
CC be double or single stranded. They further comprise sense and antisense
CC regions, or alternatively are assembled from a sense oligonucleotide and
CC an antisense oligonucleotide. Specifically, the siNAs include short
CC interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short
CC hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,
CC can contain deoxyribonucleotides, and can be chemically synthesised,
CC expressed from a vector or enzymatically synthesised. The invention also
CC relates to kits for the in vitro or in vivo delivery of siNA; conjugates
CC and/or complexes of siNA; and vectors that express siNA. The siNAs are
CC used to modulate expression of the telomerase genes in cells, tissue
CC explants or organisms (e.g., by ex vivo gene therapy), or in grafts and
CC transplants for the treatment of a variety of conditions. They may be
```

CC used for treating cancer, restenosis, infectious diseases (specifically  
 CC protozoal), transplant rejection, or autoimmune or age-related diseases,  
 CC e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,  
 CC skin ulcers and rheumatoid arthritis. The siRNAs are also useful for drug  
 CC screening, diagnosis, therapeutic target identification and validation,  
 CC genetic engineering, pharmacogenomics, studying gene function, and gene  
 CC mapping (e.g., of single nucleotide polymorphisms). The present sequence  
 CC represents a siRNA targeted to the human TERT mRNA transcript.  
 XX  
 SQ Sequence 21 BP; 4 A; 13 C; 3 G; 0 T; 1 U; 0 Other;

Query Match 4.7%; Score 21; DB 1; Length 21;  
 Best Local Similarity 100.0%; Pred. No. 1.2e+02;  
 Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 GGTTCGGAGGCTGGCTGG 22  
 Db 21 GGTTCGGAGGCTGGCTGG 1

RESULT 137  
 ADF93866/C

ID ADF93866 standard; RNA; 21 BP.

XX ADF93866;

XX 26-FEB-2004 (first entry)

XX Human TERT siRNA, SEQ ID 593.

XX Cyostatic; vasotropic; protozoacide; immunosuppressive; dermatological;  
 KW neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;  
 KW antiarthritic; antiinflammatory; gene therapy; telomerase; human; tarc;  
 KW RNA interference; short interfering nucleic acid; siRNA;  
 KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;  
 KW short hairpin RNA; shRNA; expression modulation; gene therapy;  
 KW drug screening; diagnosis; therapeutic target identification;  
 KW pharmacogenomics; gene function analysis; gene mapping; TERC; TERT; ss.

XX Synthetic.

OS Homo sapiens.

XX WO2003070742-A1.

XX 28-AUG-2003.

XX 11-FEB-2003; 2003WO-US004088.

XX 20-FEB-2002; 2002US-0358580P.

PR 11-MAR-2002; 2002US-0363124P.

PR 06-JUN-2002; 2002US-0386782P.

PR 17-JUL-2002; 2002US-0396600P.

PR 29-AUG-2002; 2002US-0406784P.

PR 05-SEP-2002; 2002US-0408378P.

PR 09-SEP-2002; 2002US-0409293P.

PR 15-JAN-2003; 2003US-0440129P.

XX (RIBO-) RIBOZYME PHARM INC.

XX Mcswiggen J, Beigelman L;

XX WPI; 2003-689777/65.

XX New short interfering nucleic acid downregulates expression of the

PT telomerase gene useful e.g. for treatment and diagnosis of cancer.

XX Example 3; SEQ ID NO 593; 145pp; English.

XX The invention relates to short interfering nucleic acids (siNA) which

CC downregulate expression of the one or more telomerase genes by RNA

CC interference. The siRNAs may or may not comprise ribonucleotides and may

CC be double or single stranded. They further comprise sense and antisense

CC regions, or alternatively are assembled from a sense oligonucleotide and

CC an antisense oligonucleotide. Specifically, the siRNAs include short  
 CC interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short  
 CC hairpin RNA (shRNA). The siRNAs can be unmodified or chemically modified,  
 CC can contain deoxyribonucleotides, and can be chemically synthesised.  
 CC expressed from a vector or enzymatically synthesised. The invention also  
 CC relates to kits for the in vitro or in vivo delivery of siRNA; conjugates  
 CC and/or complexes of siNA; and vectors that express siNA. The siRNAs are  
 CC used to modulate expression of the telomerase genes in cells, tissue  
 CC explants or organisms (e.g., by ex vivo gene therapy), or in grafts and  
 CC transplants for the treatment of a variety of conditions. They may be  
 CC used for treating cancer, restenosis, infectious diseases (specifically  
 CC protozoal), transplant rejection, or autoimmune or age-related diseases,  
 CC e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,  
 CC skin ulcers and rheumatoid arthritis. The siRNAs are also useful for drug  
 CC screening, diagnosis, therapeutic target identification and validation,  
 CC genetic engineering, pharmacogenomics, studying gene function, and gene  
 CC mapping (e.g., of single nucleotide polymorphisms). The present sequence  
 CC represents a siRNA targeted to the human TERT mRNA transcript.  
 XX

SQ Sequence 21 BP; 1 A; 5 C; 10 G; 0 T; 5 U; 0 Other;

Query Match 4.7%; Score 21; DB 1; Length 21;  
 Best Local Similarity 100.0%; Pred. No. 1.2e+02;  
 Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 283 GCACCCACTGCCACCGCGAAG 303

Db 21 GCACCCACTGCCACCGCGAAG 1

RESULT 138

ADFP3859

ID ADF93859 standard; RNA; 21 BP.

XX ADF93859;

XX 26-FEB-2004 (first entry)

XX Human TERT siRNA, SEQ ID 586.

XX Cyostatic; vasotropic; protozoacide; immunosuppressive; dermatological;  
 KW neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;  
 KW antiarthritic; antiinflammatory; gene therapy; telomerase; human; tarc;  
 KW RNA interference; short interfering nucleic acid; siNA;  
 KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;  
 KW short hairpin RNA; shRNA; expression modulation; gene therapy;  
 KW drug screening; diagnosis; therapeutic target identification;  
 KW pharmacogenomics; gene function analysis; gene mapping; TERC; TERT; ss.

XX Synthetic.

OS Homo sapiens.

XX WO2003070742-A1.

XX 28-AUG-2003.

XX 11-FEB-2003; 2003WO-US004088.

XX 20-FEB-2002; 2002US-0358580P.

PR 11-MAR-2002; 2002US-0363124P.

PR 06-JUN-2002; 2002US-0386782P.

PR 17-JUL-2002; 2002US-0396600P.

PR 29-AUG-2002; 2002US-0406784P.

PR 05-SEP-2002; 2002US-0408378P.

PR 09-SEP-2002; 2002US-0409293P.

PR 15-JAN-2003; 2003US-0440129P.

XX (RIBO-) RIBOZYME PHARM INC.

XX Mcswiggen J, Beigelman L;

XX WPI; 2003-689777/65.

PT New short interfering nucleic acid downregulates expression of the  
PT telomerase gene useful e.g. for treatment and diagnosis of cancer.  
XX  
PS Example 3; SEQ ID NO 586; 145pp; English.  
XX  
XX The invention relates to short interfering nucleic acids (siNA) which  
CC downregulate expression of the one or more telomerase genes by RNA  
CC interference. The siNAs may or may not comprise ribonucleotides and may  
CC be double or single stranded. They further comprise sense and antisense  
CC regions, or alternatively are assembled from a sense oligonucleotide and  
CC an antisense oligonucleotide. Specifically, the siNAs include short  
CC interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short  
CC hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,  
CC can contain deoxyribonucleotides, and can be chemically synthesised,  
CC expressed from a vector or enzymatically synthesised. The invention also  
CC relates to kits for the in vitro or in vivo delivery of siNA; conjugates  
CC and/or complexes of siNA; and vectors that express siNA. The siNAs are  
CC used to modulate expression of the telomerase genes in cells, tissue  
CC explants or organisms (e.g., by ex vivo gene therapy), or in grafts and  
CC transplants for the treatment of a variety of conditions. They may be  
CC used for treating cancer, restenosis, or autoimmune or age-related diseases,  
CC e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,  
CC skin ulcers and rheumatoid arthritis. The siNAs are also useful for drug  
CC screening, diagnosis, therapeutic target identification and validation,  
CC genetic engineering, pharmacogenomics, studying gene function, and gene  
CC mapping (e.g., of single nucleotide polymorphisms). The present sequence  
XX represents a siRNA targeted to the human TERT mRNA transcript.  
SQ Sequence 21 BP; 2 A; 3 C; 12 G; 0 T; 4 U; 0 Other;  
  
Query Match 4.7%; Score 21; DB 1; Length 21;  
Best Local Similarity 81.0%; Pred. No. 1.2e+02;  
Matches 17; Conservative 4; Mismatches 0; Indels 0; Gaps 0;  
  
Qy 4 TTGGGAGGCTGGCCCTGGGA 24  
:::|||||:|||||:  
Db 1 UUGCGAGGGUGGCGCCGGGA 21  
  
RESULT 139  
ADF93861  
ID ADF93861 standard; RNA; 21 BP.  
XX  
AC ADF93861;  
XX  
DT 26-FEB-2004 (first entry)  
XX  
DE Human TERT siRNA, SEQ ID 588.  
XX  
XX Cytostatic; vasotropic; protozoacide; immunosuppressive; dermatological;  
KW neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;  
KW antiarthritic; antiinflammatory; gene therapy; telomerase; human; terc;  
KW RNA interference; short interfering nucleic acid; siNA;  
KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;  
KW short hairpin RNA; shRNA; expression modulation; gene therapy;  
KW drug screening; diagnosis; therapeutic target identification;  
KW pharmacogenomics; gene function analysis; gene mapping; TERC; TERT; ss.  
XX  
XX Synthetic.  
OS Homo sapiens.  
OS  
PN WO2003070742-A1.  
XX  
XX 28-AUG-2003.  
XX  
XX 11-FEB-2003; 2003WO-US004088.  
XX  
XX 20-FEB-2002; 2002US-0358580P.  
PR 11-MAR-2002; 2002US-0363124P.  
PR 06-JUN-2002; 2002US-0386782P.  
PR 17-JUL-2002; 2002US-0396600P.  
PR 29-AUG-2002; 2002US-0406784P.

05-SEP-2002; 2002US-0408378P.  
09-SEP-2002; 2002US-0409293P.  
15-JAN-2003; 2003US-0440129P.  
PA (RIBO-) RIBOZYME PHARM INC.  
XX  
XX Mcswiggen J, Beigelman L;  
XX  
XX WPI; 2003-689777/65.  
XX  
XX New short interfering nucleic acid downregulates expression of the  
PT telomerase gene useful e.g. for treatment and diagnosis of cancer.  
XX  
PS Example 3; SEQ ID NO 588; 145pp; English.  
XX  
XX The invention relates to short interfering nucleic acids (siNA) which  
CC downregulate expression of the one or more telomerase genes by RNA  
CC interference. The siNAs may or may not comprise ribonucleotides and may  
CC be double or single stranded. They further comprise sense and antisense  
CC regions, or alternatively are assembled from a sense oligonucleotide and  
CC an antisense oligonucleotide. Specifically, the siNAs include short  
CC interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short  
CC hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,  
CC can contain deoxyribonucleotides, and can be chemically synthesised,  
CC expressed from a vector or enzymatically synthesised. The invention also  
CC relates to kits for the in vitro or in vivo delivery of siNA; conjugates  
CC and/or complexes of siNA; and vectors that express siNA. The siNAs are  
CC used to modulate expression of the telomerase genes in cells, tissue  
CC explants or organisms (e.g., by ex vivo gene therapy), or in grafts and  
CC transplants for the treatment of a variety of conditions. They may be  
CC used for treating cancer, restenosis, or autoimmune or age-related diseases,  
CC e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,  
CC skin ulcers and rheumatoid arthritis. The siNAs are also useful for drug  
CC screening, diagnosis, therapeutic target identification and validation,  
CC genetic engineering, pharmacogenomics, studying gene function, and gene  
CC mapping (e.g., of single nucleotide polymorphisms). The present sequence  
XX represents a siRNA targeted to the human TERT mRNA transcript.  
SQ Sequence 21 BP; 6 A; 9 C; 5 G; 0 T; 1 U; 0 Other;  
  
Query Match 4.7%; Score 21; DB 1; Length 21;  
Best Local Similarity 95.2%; Pred. No. 1.2e+02;  
Matches 20; Conservative 1; Mismatches 0; Indels 0; Gaps 0;  
  
Qy 285 ACCCACTGCCCGCGAAGAG 305  
|||||:|||||:  
Db 1 ACCCACUGCCCGCGAAGAG 21  
  
RESULT 140  
ADF93865/c  
ID ADF93865 standard; RNA; 21 BP.  
XX  
AC ADF93865;  
XX  
DT 26-FEB-2004 (first entry)  
XX  
XX Human TERT siRNA, SEQ ID 592.  
XX  
XX Cytostatic; vasotropic; protozoacide; immunosuppressive; dermatological;  
KW neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;  
KW antiarthritic; antiinflammatory; gene therapy; telomerase; human; terc;  
KW RNA interference; short interfering nucleic acid; siNA;  
KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;  
KW short hairpin RNA; shRNA; expression modulation; gene therapy;  
KW drug screening; diagnosis; therapeutic target identification;  
KW pharmacogenomics; gene function analysis; gene mapping; TERC; TERT; ss.  
XX  
XX Synthetic.  
OS Homo sapiens.  
OS  
PN WO2003070742-A1.



KW Alzheimer's; Parkinson's; epilepsy; dementia; huntington's;  
 KW amyotrophic lateral sclerosis; gene therapy; ss; htr.

XX Unidentified.

XX WO2003074654-A2.

XX 12-SEP-2003.

XX 20-FEB-2003; 2003WO-US005028.

XX 20-FEB-2002; 2002US-0358580P.

XX 11-MAR-2002; 2002US-0363124P.

XX 06-JUN-2002; 2002US-0386782P.

XX 29-AUG-2002; 2002US-0406784P.

XX 05-SEP-2002; 2002US-0408378P.

XX 09-SEP-2002; 2002US-0409293P.

XX 15-JAN-2003; 2003US-0440129P.

XX (STRN-) SIRNA THERAPEUTICS INC.

XX McSwiggen J, Beigelman L, Chowrira B, Pavco P, Fosnaugh K;  
 XX Jamison S, Usman N, Thompson J;

XX WPI; 2003-731676/69.

XX

XX New double-stranded short interfering nucleic acid molecule, useful for  
 PT down-regulating the expression of an endogenous mammalian target gene or  
 PT for treating diseases that respond to modulation of gene expression or  
 PT activity.

XX Example 24; SEQ ID NO 594; 593pp; English.

XX The invention relates to a double-stranded short interfering nucleic acid  
 CC (siRNA) molecule that down-regulates expression of an endogenous mammalian  
 CC target gene comprising one or more chemical modifications and each strand  
 CC of the double-stranded siRNA comprises about 21 nucleotides. The siRNA of  
 CC the invention demonstrates antiarteriosclerotic, neuroprotective,  
 CC neurotropic, antiparkinsonian and anticonvulsant activities and may be  
 CC useful for down-regulating the expression of an endogenous mammalian  
 CC target gene and therefore in the treatment of any disease or condition  
 CC that responds to modulation of gene expression or activity in a cell,  
 CC tissue or organism. The disease or condition may include pulmonary  
 CC diseases such as restenosis, atherosclerosis, Alzheimer's disease,  
 CC Parkinson's disease, epilepsy, dementia, huntington's disease or  
 CC amyotrophic lateral sclerosis. Furthermore, the siRNA may be utilised for  
 CC gene therapy applications. The current sequence is that of the siRNA  
 CC of the invention.

XX Sequence 21 BP; 2 A; 3 C; 12 G; 0 T; 4 U; 0 Other;

Query Match 4.7%; Score 21; DB 1; Length 21;  
 Best Local Similarity 81.0%; Pred. No. 1.2e+02;  
 Matches 17; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

Qy 4 TTGCGGAGGGTGGCGCTGGGA 24

Db 1 UUGCGGAGGGTGGCGCTGGGA 21

RESULT 143

ADG30030

ID ADG30030 standard; RNA; 21 BP.

XX AC ADG30030;

XX 26-FEB-2004 (first entry)

XX hTR-targeted siRNA RNA - SEQ ID 596.

XX double-stranded short interfering nucleic acid; siRNA;  
 KW antiarteriosclerotic; neuroprotective; neurotropic; antiparkinsonian;  
 KW anticonvulsant; pulmonary disease; restenosis; atherosclerosis;

KW Alzheimer's; Parkinson's; epilepsy; dementia; huntington's;  
 KW amyotrophic lateral sclerosis; gene therapy; ss; htr.

XX Unidentified.

XX WO2003074654-A2.

XX 12-SEP-2003.

XX 20-FEB-2003; 2003WO-US005028.

XX 20-FEB-2002; 2002US-0358580P.

XX 11-MAR-2002; 2002US-0363124P.

XX 06-JUN-2002; 2002US-0386782P.

XX 29-AUG-2002; 2002US-0406784P.

XX 05-SEP-2002; 2002US-0408378P.

XX 09-SEP-2002; 2002US-0409293P.

XX 15-JAN-2003; 2003US-0440129P.

XX (SIRN-) SIRNA THERAPEUTICS INC.

XX McSwiggen J, Beigelman L, Chowrira B, Pavco P, Fosnaugh K;  
 XX Jamison S, Usman N, Thompson J;

XX WPI; 2003-731676/69.

XX

XX New double-stranded short interfering nucleic acid molecule, useful for  
 PT down-regulating the expression of an endogenous mammalian target gene or  
 PT for treating diseases that respond to modulation of gene expression or  
 PT activity.

XX Example 24; SEQ ID NO 596; 593pp; English.

XX The invention relates to a double-stranded short interfering nucleic acid  
 CC (siRNA) molecule that down-regulates expression of an endogenous mammalian  
 CC target gene comprising one or more chemical modifications and each strand  
 CC of the double-stranded siRNA comprises about 21 nucleotides. The siRNA of  
 CC the invention demonstrates antiarteriosclerotic, neuroprotective,  
 CC neurotropic, antiparkinsonian and anticonvulsant activities and may be  
 CC useful for down-regulating the expression of an endogenous mammalian  
 CC target gene and therefore in the treatment of any disease or condition  
 CC that responds to modulation of gene expression or activity in a cell,  
 CC tissue or organism. The disease or condition may include pulmonary  
 CC diseases such as restenosis, atherosclerosis, Alzheimer's disease,  
 CC Parkinson's disease, epilepsy, dementia, huntington's disease or  
 CC amyotrophic lateral sclerosis. Furthermore, the siRNA may be utilised for  
 CC gene therapy applications. The current sequence is that of the siRNA  
 CC of the invention.

XX Sequence 21 BP; 6 A; 9 C; 5 G; 0 T; 1 U; 0 Other;

Query Match 4.7%; Score 21; DB 1; Length 21;  
 Best Local Similarity 95.2%; Pred. No. 1.2e+02;  
 Matches 20; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 285 ACCCACTGCCACCCGGAAGAG 305

Db 1 ACCCACTGCCACCCGGAAGAG 21

RESULT 144

ADG30036/C

ID ADG30036 standard; RNA; 21 BP.

XX AC ADG30036;

XX 26-FEB-2004 (first entry)

XX hTR-targeted siRNA RNA - SEQ ID 602.

XX double-stranded short interfering nucleic acid; siRNA;  
 KW antiarteriosclerotic; neuroprotective; neurotropic; antiparkinsonian;  
 KW anticonvulsant; pulmonary disease; restenosis; atherosclerosis;

KW Alzheimer's; Parkinson's; epilepsy; dementia; huntington's;  
KW amyotrophic lateral sclerosis; gene therapy; ss; htr.  
XX Unidentified.  
XX WO2003074654-A2.  
XX 12-SEP-2003.  
XX 20-FEB-2003; 2003WO-US005028.  
XX 20-FEB-2002; 2002US-0358580P.  
PR 11-MAR-2002; 2002US-0363124P.  
PR 06-JUN-2002; 2002US-0386782P.  
PR 29-AUG-2002; 2002US-0406784P.  
PR 05-SEP-2002; 2002US-0408378P.  
PR 09-SEP-2002; 2002US-0409293P.  
PR 15-JAN-2003; 2003US-0440129P.  
XX (SIRN-) SIRNA THERAPEUTICS INC.  
XX Mcswiggen J, Beigelman L, Chowrira B, Pavco P, Fosnaugh K;  
PI Jamison S, Usman N, Thompson J;  
XX WPI; 2003-731676/69.  
XX New double-stranded short interfering nucleic acid molecule, useful for  
PT down-regulating the expression of an endogenous mammalian target gene or  
PT for treating diseases that respond to modulation of gene expression or  
PT activity.  
XX Example 24; SEQ ID NO 602; 593pp; English.  
XX The invention relates to a double-stranded short interfering nucleic acid  
CC (siNA) molecule that down-regulates expression of an endogenous mammalian  
CC target gene comprising one or more chemical modifications and each strand  
CC of the double-stranded siNA comprises about 21 nucleotides. The siNA of  
CC the invention demonstrates antiarteriosclerotic, neuroprotective,  
CC neurotropic, antiparkinsonian and anticonvulsant activities and may be  
CC useful for down-regulating the expression of an endogenous mammalian  
CC target gene and therefore in the treatment of any disease or condition  
CC that responds to modulation of gene expression or activity in a cell,  
CC tissue or organism. The disease or condition may include pulmonary  
CC diseases such as restenosis, atherosclerosis, Alzheimer's disease,  
CC Parkinson's disease, epilepsy, dementia, huntington's disease or  
CC amyotrophic lateral sclerosis. Furthermore, the siNA may be utilised for  
CC gene therapy applications. The current sequence is that of the siNA RNA  
CC of the invention.  
XX SQ Sequence 21 BP; 3 A; 8 C; 8 G; 0 T; 2 U; 0 Other;  
Query Match 4.7%; Score 21; DB 1; Length 21;  
Best Local Similarity 100.0%; Pred. No. 1.2e+02;  
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 395 GCGGCGCGGATTCCTGAGC 415  
DB 21 GCGGCGCGGATTCCTGAGC 1  
RESULT 145  
ADG30035/C  
ID ADG30035 standard; RNA; 21 BP.  
XX AC ADG30035;  
XX 26-FEB-2004 (first entry)  
DT hTR-targeted siNA RNA - SEQ ID 601.  
DE double-stranded short interfering nucleic acid; siNA;  
KW antiarteriosclerotic; neuroprotective; neurotropic; antiparkinsonian;  
KW anticonvulsant; pulmonary disease; restenosis; atherosclerosis;

KW Alzheimer's; Parkinson's; epilepsy; dementia; huntington's;  
KW amyotrophic lateral sclerosis; gene therapy; ss; htr.  
XX Unidentified.  
XX WO2003074654-A2.  
XX 12-SEP-2003.  
XX 20-FEB-2003; 2003WO-US005028.  
XX 20-FEB-2002; 2002US-0358580P.  
PR 11-MAR-2002; 2002US-0363124P.  
PR 06-JUN-2002; 2002US-0386782P.  
PR 29-AUG-2002; 2002US-0406784P.  
PR 05-SEP-2002; 2002US-0408378P.  
PR 09-SEP-2002; 2002US-0409293P.  
PR 15-JAN-2003; 2003US-0440129P.  
XX (SIRN-) SIRNA THERAPEUTICS INC.  
XX Mcswiggen J, Beigelman L, Chowrira B, Pavco P, Fosnaugh K;  
PI Jamison S, Usman N, Thompson J;  
XX WPI; 2003-731676/69.  
XX New double-stranded short interfering nucleic acid molecule, useful for  
PT down-regulating the expression of an endogenous mammalian target gene or  
PT for treating diseases that respond to modulation of gene expression or  
PT activity.  
XX Example 24; SEQ ID NO 601; 593pp; English.  
XX The invention relates to a double-stranded short interfering nucleic acid  
CC (siNA) molecule that down-regulates expression of an endogenous mammalian  
CC target gene comprising one or more chemical modifications and each strand  
CC of the double-stranded siNA comprises about 21 nucleotides. The siNA of  
CC the invention demonstrates antiarteriosclerotic, neuroprotective,  
CC neurotropic, antiparkinsonian and anticonvulsant activities and may be  
CC useful for down-regulating the expression of an endogenous mammalian  
CC target gene and therefore in the treatment of any disease or condition  
CC that responds to modulation of gene expression or activity in a cell,  
CC tissue or organism. The disease or condition may include pulmonary  
CC diseases such as restenosis, atherosclerosis, Alzheimer's disease,  
CC Parkinson's disease, epilepsy, dementia, huntington's disease or  
CC amyotrophic lateral sclerosis. Furthermore, the siNA may be utilised for  
CC gene therapy applications. The current sequence is that of the siNA RNA  
CC of the invention.  
XX SQ Sequence 21 BP; 1 A; 5 C; 10 G; 0 T; 5 U; 0 Other;  
Query Match 4.7%; Score 21; DB 1; Length 21;  
Best Local Similarity 100.0%; Pred. No. 1.2e+02;  
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 283 GCACCCACTGCCACCGCGAAG 303  
DB 21 GCACCCACTGCCACCGCGAAG 1  
RESULT 146  
ADG30029  
ID ADG30029 standard; RNA; 21 BP.  
XX AC ADG30029;  
XX 26-FEB-2004 (first entry)  
DT hTR-targeted siNA RNA - SEQ ID 595.  
DE double-stranded short interfering nucleic acid; siNA;  
KW antiarteriosclerotic; neuroprotective; neurotropic; antiparkinsonian;  
KW anticonvulsant; pulmonary disease; restenosis; atherosclerosis;





KW Alzheimer's; Parkinson's; epilepsy; dementia; huntington's;  
KW amyotrophic lateral sclerosis; gene therapy; ss; hTR.  
XX Unidentified.  
XX WO2003074654-A2.  
XX 12-SEP-2003.  
XX 20-FEB-2003; 2003WO-US005028.  
XX 20-FEB-2002; 2002US-0358580P.  
PR 11-MAR-2002; 2002US-0363124P.  
PR 06-JUN-2002; 2002US-0386782P.  
PR 29-AUG-2002; 2002US-0406784P.  
PR 05-SEP-2002; 2002US-0408378P.  
PR 09-SEP-2002; 2002US-0409293P.  
PR 15-JAN-2003; 2003US-0440129P.  
XX (SIRN-) SIRNA THERAPEUTICS INC.  
XX Meswigen J, Beigelman L, Chowira B, Pavco P, Posnaugh K;  
PI Jamison S, Usman N, Thompson J;  
XX WPI; 2003-731676/69.  
XX New double-stranded short interfering nucleic acid molecule, useful for  
PT down-regulating the expression of an endogenous mammalian target gene or  
PT for treating diseases that respond to modulation of gene expression or  
PT activity.  
XX Example 24; SEQ ID NO 600; 593pp; English.  
XX The invention relates to a double-stranded short interfering nucleic acid  
CC (siNA) molecule that down-regulates expression of an endogenous mammalian  
CC target gene comprising one or more chemical modifications and each strand  
CC of the double-stranded siNA comprises about 21 nucleotides. The siNA of  
CC the invention demonstrates antiarteriosclerotic, neuroprotective,  
CC neurotropic, antiparkinsonian and anticonvulsant activities and may be  
CC useful for down-regulating the expression of an endogenous mammalian  
CC target gene and therefore in the treatment of any disease or condition  
CC that responds to modulation of gene expression or activity in a cell,  
CC tissue or organism. The disease or condition may include pulmonary  
CC diseases such as restenosis, atherosclerosis, Alzheimer's disease,  
CC Parkinson's disease, epilepsy, dementia, huntington's disease or  
CC amyotrophic lateral sclerosis. Furthermore, the siNA may be utilised for  
CC gene therapy applications. The current sequence is that of the siNA RNA  
CC of the invention.  
XX Sequence 21 BP; 5 A; 4 C; 11 G; 0 T; 1 U; 0 Other;  
SQ Query Match 4.7%; Score 21; DB 1; Length 21;  
Best Local Similarity 100.0%; Pred. No. 1.2e+02;  
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 136 GCGTCGCGCCTTCACCGTTC 156  
DB 21 GCGTCGCGCCTTCACCGTTC 1  
RESULT 149  
ADQ94244  
ID ADQ94244 standard; DNA; 21 BP.  
XX AC ADQ94244;  
XX 21-OCT-2004 (first entry)  
XX Short hairpin RNA oligonucleotide SHRNA12.  
KW ss; antiarthritic; antirheumatic; cardiovascular; cytostatic;  
KW gene therapy; adeno-associated virus; RNAi; RNA interference;  
KW short interfering RNA; gene silencing; short hairpin RNA; cancer;  
KW

KW cardiovascular disease; immune disease; rheumatoid arthritis;  
KW angiogenic abnormality.  
XX Synthetic.  
XX WO2004063380-A1.  
XX 29-JUL-2004.  
XX 07-NOV-2003; 2003WO-CN0000939.  
XX 07-NOV-2002; 2002CN-00149319.  
XX (AGTC-) AGTC GENE TECHNOLOGY CO LTD.  
XX Wu X, Dong X, Ma X, Lu X, Hou Y;  
XX WPI; 2004-553738/53.  
XX Series of recombinant adeno-associated viruses useful for inducing RNA  
PT interference pathway and for gene therapy in treating e.g. cancer,  
PT cardiovascular diseases, rheumatoid arthritis and angiogenic  
PT abnormalities.  
XX Example 8; SEQ ID NO 20; 53pp; Chinese.  
XX The invention relates to an adeno-associated virus (AAV) that carries a  
CC specific RNAi (RNA interference) nucleotide fragment comprising  
CC components of the outer shell of a recombinant AAV, a specific RNAi  
CC nucleotide fragment, and a control element for regulating the  
CC transcription and expression of the RNAi nucleotide fragment carried by  
CC encapsulation within the outer shell of a recombinant AAV. The  
CC recombinant viruses are useful for inducing RNAi pathway and gene therapy  
CC in treating e.g. cancer, cardiovascular diseases, immune diseases like  
CC rheumatoid arthritis and angiogenic abnormalities. This sequence  
CC corresponds to a short hairpin RNA (shRNA) oligonucleotide used in the  
CC invention.  
XX Sequence 21 BP; 4 A; 4 C; 8 G; 5 T; 0 U; 0 Other;  
SQ Query Match 4.7%; Score 21; DB 1; Length 21;  
Best Local Similarity 100.0%; Pred. No. 1.2e+02;  
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 300 GAAGAGTGGGCTCTGTCAGC 320  
DB 1 GAAGAGTGGGCTCTGTCAGC 21  
RESULT 150  
ADQ94243  
ID ADQ94243 standard; DNA; 21 BP.  
XX AC ADQ94243;  
XX 21-OCT-2004 (first entry)  
XX Short hairpin RNA oligonucleotide SHRNA11.  
KW ss; antiarthritic; antirheumatic; cardiovascular; cytostatic;  
KW gene therapy; adeno-associated virus; RNAi; RNA interference;  
KW short interfering RNA; gene silencing; short hairpin RNA; cancer;  
KW cardiovascular disease; immune disease; rheumatoid arthritis;  
KW angiogenic abnormality.  
XX Synthetic.  
XX WO2004063380-A1.  
XX 29-JUL-2004.  
XX 07-NOV-2003; 2003WO-CN0000939.  
XX

PR 07-NOV-2002; 2002CN-00149319.  
XX (AGTC-) AGTC GENE TECHNOLOGY CO LTD.  
XX Wu X, Dong X, Ma X, Lu X, Hou Y;  
XX WPI; 2004-553738/53.  
XX Series of recombinant adeno-associated viruses useful for inducing RNA  
PT interference pathway and for gene therapy in treating e.g. cancer,  
PT cardiovascular diseases, rheumatoid arthritis and angiogenic  
PT abnormalities.  
XX Example 8; SEQ ID NO 19; 53pp; Chinese.  
XX The invention relates to an adeno-associated virus (AAV) that carries a  
CC specific RNAi (RNA interference) nucleotide fragment comprising  
CC components of the outer shell of a recombinant AAV, a specific RNAi  
CC nucleotide fragment, and a control element for regulating the  
CC transcription and expression of the RNAi nucleotide fragment carried by  
CC encapsulation within the outer shell of a recombinant AAV. The  
CC recombinant viruses are useful for inducing RNAi pathway and gene therapy  
CC in treating e.g. cancer, cardiovascular diseases, immune diseases like  
CC rheumatoid arthritis and angiogenic abnormalities. This sequence  
CC corresponds to a short hairpin RNA (shRNA) oligonucleotide used in the  
CC invention.  
XX Sequence 21 BP; 3 A; 8 C; 3 G; 7 T; 0 U; 0 Other;  
SQ Query Match 4.7%; Score 21; DB 1; Length 21;  
Best Local Similarity 100.0%; Pred. No. 1.2e+02;  
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
OY 143 GCCTTCCACCGTTCATTCTAG 163  
DB 1 GCCTTCCACCGTTCATTCTAG 21  
RESULT 151  
ADT86999  
ID ADT86999 standard; RNA; 21 BP.  
XX  
AC ADT86999;  
XX  
DT 16-DEC-2004 (first entry)  
XX siRNA sequence used for RNA inhibition.  
XX  
KW ss; snRNA; small nuclear RNA; box H/ACA; mRNA splicing; mRNA processing;  
KW RNA processing; RNA methylation site selection; pseudouridine formation;  
KW H/ACA-snRNA; telomerase RNA; cancer; tumour; cell proliferation;  
KW trypanosome infection; RNAi-mediated degradation; neo gene; siRNA;  
KW small interfering RNA; TER; human; telomerase; RNAi; selection marker.  
XX Homo sapiens.  
XX  
XX WO2004069148-A2.  
XX  
XX 19-AUG-2004.  
XX  
XX 04-FEB-2004; 2004WO-IL000108.  
XX  
XX 04-FEB-2003; 2003US-0444670P.  
XX (UYBA-) UNIV BAR-ILAN.  
XX Michaeli S;  
XX  
XX WPI; 2004-604326/58.  
XX  
XX New isolated small nuclear RNA (snRNA) polynucleotides, useful for  
PT inducing RNAi-mediated degradation of snRNA or for treating diseases  
PT associated with activity of small nuclear RNA, e.g. cancer.

XX Disclosure; Page 24; 79pp; English.  
XX The present invention provides the method for downregulating snRNA  
CC (small nuclear RNA) molecules or the box H/ACA containing RNA molecules.  
CC The method can be used to treat the diseases associated with the activity  
CC of small nuclear RNA. Small nuclear RNA molecules are the important  
CC regulators of gene expression. They participate in mRNA splicing, mRNA  
CC and RNA processing, RNA methylation site selection and pseudouridine  
CC formation (box H/ACA-snRNA). The telomerase RNA is an important nuclear  
CC RNA which serves as a template for telomerase replication. It contains  
CC box H/ACA like domain which confers the functional localisation of this  
CC RNA to the nucleus. The majority of the cancerous tumours contain active  
CC telomerase which contributes to cell proliferation. It has been found  
CC that the trypanosome infection is associated with the parasite's snRNA  
CC expression. The polynucleotides of the invention are useful for inducing  
CC RNAi-mediated degradation of a small nuclear RNA. They are useful for  
CC down regulating snRNA molecules or box H/ACA-containing RNA molecules.  
CC The telomerase activity of the cancer cells can be inhibited by a  
CC polynucleotide sequence which is capable of inducing RNAi mediated  
CC degradation of the human telomerase RNA. The snRNA-2 was found to be  
CC part of a gene cluster which includes two additional coding sequences of  
CC novel RNA termed as h2 and h3. It has also observed that the snRNA-2  
CC silencing occurs at the mature RNA transcript level and snRNA silencing  
CC results in decreased snRNA-2 guided methylation on the 5.8rRNA. The  
CC expression level of the snRNA-2 transcripts depend on the orientation of  
CC the snRNA-2 gene with respect to neo gene (selection marker). It has  
CC also found that the silencing of sno-RNA-2 is mediated through the  
CC production of siRNA (small interfering RNA) which can produce in both  
CC nucleus and cytoplasm. The invention suggests that the siRNA mediated  
CC snRNA-2 silencing is not unique to snRNA cluster-2. It is also  
CC applicable for mammalian snRNAs. The proposed nucleic acid construct  
CC comprises of a selection marker gene in reverse orientation. It also  
CC includes two promoters and each promoter is capable of directing the  
CC transcription of a specific strand of the nucleotide. The presented  
CC nucleotide sequence is the siRNA sequence which was used for snRNA  
CC inhibition.  
XX  
SQ Sequence 21 BP; 7 A; 5 C; 5 G; 0 T; 4 U; 0 Other;  
Query Match 4.7%; Score 21; DB 1; Length 21;  
Best Local Similarity 81.0%; Pred. No. 1.2e+02;  
Matches 17; Conservative 4; Mismatches 0; Indels 0; Gaps 0;  
OY 44 GTCTAACCTTAACGTGAGAGG 64  
DB 1 GUCUACCCUACUGAGAGG 21  
RESULT 152  
AAT11035/c  
ID AAT11035 standard; DNA; 20 BP.  
XX  
AC AAT11035;  
XX  
DT 02-JUL-1996 (first entry)  
XX  
DE Antisense oligonucleotide (Tel-AU) inhibiting telomerase activity.  
XX  
KW Telomerase; mammal; antisense; triplex forming oligonucleotide; plasmid;  
KW probe; primer; ribozyme; ss.  
XX Synthetic.  
XX OS  
XX WO9601614-A2.  
XX  
PD 25-JAN-1996.  
XX  
PF 07-JUL-1995; 95WO-US008620.  
XX  
PR 07-JUL-1994; 94US-00272102.  
PR 27-OCT-1994; 94US-00330123.  
PR 13-FEB-1995; 95US-00387524.

PR 07-JUN-1995; 95US-00485778.  
 XX (COLD-) COLD SPRING HARBOR LAB.  
 PA (GERO-) GERON CORP.  
 XX  
 PI Andrews WH, Avillon AA, Feng J, Funk W, Greider C, Marhuenda MA;  
 PI Villeponteau B;  
 XX WPI; 1996-097428/10.  
 XX  
 XX RNA components of (non)human mammalian telomerase(s) - useful in studying  
 PT cell senescence and immortalisation.  
 PT  
 XX Disclosure; Page 23; 85pp; English.  
 PS  
 XX The RNA components of (non) human mammalian telomerase(s) especially from  
 CC mouse, rat and chinese hamster are all claimed. Antisense  
 CC oligonucleotides can be used to block the activity of the telomerase;  
 CC probes and primers can be used in detection; vectors and host cells  
 CC transformed with the isolated telomerase genes can be used for production  
 CC of telomerases; RNA and DNA ribozymes and triplex forming  
 CC oligonucleotides directed against the telomerase genes can be used  
 CC therapeutically as can plasmids. A mouse which lacks the telomerase gene  
 CC (also claimed) can be used for study of telomere regulation in vivo, and  
 CC the role it plays in immortalisation. The antisense oligonucleotide is  
 CC synthesised as a 2-O-methyl RNA oligonucleotide and is more resistant to  
 CC hydrolysis than unmodified RNA oligonucleotides (See AAT11032-35)  
 XX  
 SQ Sequence 20 BP; 4 A; 12 C; 3 G; 1 T; 0 U; 0 Other;  
 Query Match 4.4%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 1.3e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 2 GGTTCGGAGGGTGGGCTG 21  
 DB 20 GGTTCGGAGGGTGGGCTG 1  
 RESULT 153  
 AAT11032/c  
 ID AAT11032 standard; DNA; 20 BP.  
 XX  
 AC AAT11032;  
 XX  
 DT 09-JUN-1996 (first entry)  
 XX  
 DE Antisense oligonucleotide (T3) inhibiting telomerase activity.  
 XX  
 KW Telomerase; mammal; antisense; triplex forming oligonucleotide; plasmid;  
 KW probe; primer; ribozyme; ss.  
 XX  
 OS Synthetic.  
 XX  
 PN WO9601614-A2.  
 XX  
 PD 25-JAN-1996.  
 XX  
 XX 07-JUL-1995; 95WO-US008620.  
 XX  
 PR 07-JUL-1994; 94US-00272102.  
 PR 27-OCT-1994; 94US-00330123.  
 PR 13-FEB-1995; 95US-00387524.  
 PR 07-JUN-1995; 95US-00485778.  
 XX  
 XX (COLD-) COLD SPRING HARBOR LAB.  
 PA (GERO-) GERON CORP.  
 PA  
 XX Andrews WH, Avillon AA, Feng J, Funk W, Greider C, Marhuenda MA;  
 PI Villeponteau B;  
 XX WPI; 1996-097428/10.  
 XX

PT RNA components of (non)human mammalian telomerase(s) - useful in studying  
 PT cell senescence and immortalisation.  
 PS  
 XX Disclosure; Page 23; 85pp; English.  
 XX  
 CC The RNA components of (non) human mammalian telomerase(s) especially from  
 CC mouse, rat and chinese hamster are all claimed. Antisense  
 CC oligonucleotides can be used to block the activity of the telomerase;  
 CC probes and primers can be used in detection; vectors and host cells  
 CC transformed with the isolated telomerase genes can be used for production  
 CC of telomerases; RNA and DNA ribozymes and triplex forming  
 CC oligonucleotides directed against the telomerase genes can be used  
 CC therapeutically as can plasmids. A mouse which lacks the telomerase gene  
 CC (also claimed) can be used for study of telomere regulation in vivo, and  
 CC the role it plays in immortalisation. The antisense oligonucleotide is  
 CC synthesised as a 2-O-methyl RNA oligonucleotide and is more resistant to  
 CC hydrolysis than unmodified RNA oligonucleotides (See AAT11032-35)  
 XX  
 SQ Sequence 20 BP; 7 A; 3 C; 5 G; 0 T; 5 U; 0 Other;  
 Query Match 4.4%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 1.3e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 41 TTGTGCTAACCCCTAACTGAG 60  
 DB 20 TTGTGCTAACCCCTAACTGAG 1  
 RESULT 154  
 AAT10286/c  
 ID AAT10286 standard; DNA; 20 BP.  
 XX  
 AC AAT10286;  
 XX  
 DT 09-SEP-1996 (first entry)  
 XX  
 DE RNA component of mammalian telomerase antisense oligonucleotide T3.  
 XX  
 KW RNA component; mammalian; telomerase; antisense oligonucleotide;  
 KW triple helix; inhibition; neoplastic; cells; activity; ss.  
 XX  
 OS Synthetic.  
 XX  
 PN WO9601835-A1.  
 XX  
 PD 25-JAN-1996.  
 XX  
 PF 06-JUL-1995; 95WO-US008530.  
 XX  
 PR 07-JUL-1994; 94US-00272102.  
 PR 27-OCT-1994; 94US-00330123.  
 PR 07-JUN-1995; 95US-00472802.  
 PR 07-JUN-1995; 95US-00482115.  
 XX  
 PA (GERO-) GERON CORP.  
 XX  
 PI Villeponteau B, Feng J, Funk W, Andrews WH;  
 XX  
 XX WPI; 1996-097581/10.  
 XX  
 PT RNA component of mammalian telomerase, esp. human - useful in identifying  
 PT e.g. candidate telomerase-modulating agents.  
 XX  
 PS Disclosure; Page 38; 114pp; English.  
 XX  
 XX The present sequence is a RNA component of mammalian telomerase,  
 CC antisense oligonucleotide, which can be used, along with triple helix  
 CC forming sequences, to inhibit telomerase activity in cells, esp.  
 CC neoplastic cells  
 XX  
 XX Sequence 20 BP; 7 A; 3 C; 5 G; 5 T; 0 U; 0 Other;  
 SQ

Query Match 4.4%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 1.3e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 41 TTGTCTAACCTTAACCTGAG 60  
 |||||  
 DB 20 TTGTCTAACCTTAACCTGAG 1

RESULT 155  
 AAT10289/c  
 ID AAT10289 standard; DNA; 20 BP.  
 XX  
 AC AAT10289;  
 XX  
 DT 09-SEP-1996 (first entry)  
 XX  
 DE RNA component of mammalian telomerase antisense oligo Tel-AU.  
 XX  
 KW RNA component; mammalian; telomerase; antisense oligonucleotide;  
 KW triple helix; inhibition; neoplastic; cells; activity; ss.  
 XX  
 OS Synthetic.  
 XX  
 PN WO9601835-A1.  
 XX  
 PD 25-JAN-1996.  
 XX  
 XX 06-JUL-1995; 95WO-US008530.  
 XX  
 PR 07-JUL-1994; 94US-00272102.  
 PR 27-OCT-1994; 94US-00330123.  
 PR 07-JUN-1995; 95US-00472802.  
 PR 07-JUN-1995; 95US-00482115.  
 XX  
 PA (GERO-) GERON CORP.  
 XX  
 PI Villeponteau B, Feng J, Funk W, Andrews WH;  
 XX  
 DR WPI; 1996-097581/10.  
 XX  
 XX RNA component of mammalian telomerase, esp. human - useful in identifying  
 PT e.g. candidate telomerase-modulating agents.  
 XX  
 PS Disclosure; Page 38; 114pp; English.  
 XX  
 CC The present sequence is a RNA component of mammalian telomerase,  
 CC antisense oligonucleotide, which can be used, along with triple helix  
 CC forming sequences, to inhibit telomerase activity in cells, esp.  
 CC neoplastic cells  
 XX  
 SQ Sequence 20 BP; 4 A; 12 C; 3 G; 1 T; 0 U; 0 Other;

Query Match 4.4%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 1.3e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 GGTTCGGAGGCTGGCCCTG 21  
 |||||  
 DB 20 GGTTCGGAGGCTGGCCCTG 1

RESULT 156  
 AAV71226/c  
 ID AAV71226 standard; DNA; 20 BP.  
 XX  
 AC AAV71226;  
 XX  
 DT 15-FEB-1999 (first entry)  
 XX  
 DE Antisense oligonucleotide 14ab for human telomerase RNA component.  
 XX  
 KW Human; telomerase RNA component; anticancer therapy; purification; assay;

KW vaccine; cancer; antisense oligonucleotide; ss.  
 XX  
 OS Synthetic.  
 OS Homo sapiens.  
 XX  
 FH Key Location/Qualifiers  
 FT modified\_base 1  
 FT /\*tag= a  
 FT /note= "biotinylated"  
 XX  
 XX WO9845450-A1.  
 XX  
 PD 15-OCT-1998.  
 XX  
 PF 04-APR-1997; 97WO-US006012.  
 XX  
 PR 04-APR-1997; 97WO-US006012.  
 XX  
 XX (GERO-) GERON CORP.  
 XX  
 XX Weinrich SL, Atkinson EM, Lichtsteiner SP, Vaessert AP, Pruzan RA;  
 PI Kealey JT;  
 XX  
 DR WPI; 1998-594485/50.  
 XX  
 XX Purification of telomerase on affinity material - useful for, e.g.  
 PT diagnosis and treatment of cancer.  
 XX  
 XX Claim 6; Page 61; 76pp; English.  
 PS  
 XX  
 CC The present sequence represents an antisense oligonucleotide directed  
 CC against the human telomerase RNA component gene sequences. The  
 CC oligonucleotide can be used as an affinity agent in the methods of the  
 CC invention, which are used to purify human telomerase. The methods involve  
 CC the use of several sequential steps, including the use of two matrices  
 CC that bind molecules bearing negative charges, a matrix that binds  
 CC molecules bearing positive charges, an affinity purification step and a  
 CC size separation. Telomerase is a particular target of anticancer  
 CC therapies, and is useful in assays for characterizing (pre)cancerous  
 CC cells. Telomerase can also be used to screen for specific modulators, for  
 CC biochemical analysis of its activity, and in preparation of antibodies.  
 CC Fragments of telomerase, or nucleic acid encoding them, are used in  
 CC vaccines, and for treating over expression of telomerase, particularly in  
 CC cancer  
 XX  
 SQ Sequence 20 BP; 0 A; 9 C; 4 G; 7 T; 0 U; 0 Other;

Query Match 4.4%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 1.3e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 361 AGCGCCGAGGAGGAGGACG 380  
 |||||  
 DB 20 AGCGCCGAGGAGGAGGACG 1

RESULT 157  
 AAV41173/c  
 ID AAV41173 standard; DNA; 20 BP.  
 XX  
 AC AAV41173;  
 XX  
 DT 08-OCT-1998 (first entry)  
 XX  
 DE RNA component of human telomerase (hTR) antisense oligo 16ab.  
 XX  
 KW RNA component; human telomerase; antisense oligonucleotide; infection;  
 KW neuroblastoma; bladder cancer; colon cancer; prostate cancer; cancer;  
 KW contraception; sterilisation; immunosuppression; therapeutic; hTR;  
 KW immune system down-regulation; anti-inflammatory therapy; ss.  
 XX  
 OS Synthetic.  
 OS Homo sapiens.

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XX WO9828442-A1.
PN
XX
XX
XX 02-JUL-1998.
PD
XX
XX 19-DEC-1997; 97WO-US023619.
PF
XX
XX 20-DEC-1996; 96US-00770564.
PR
XX 20-DEC-1996; 96US-00770565.
PR
XX (GERO-) GERON CORP.
PA
XX Kim NW, Wu F, Kealey JT, Pruzan R, Weinrich SL;
PI
XX WPI; 1998-377670/32.
PI
XX
XX New polynucleotide(s) anti-sense to human telomerase - used for detecting
XX or inhibiting human telomerase, e.g. for treating cancers, contraception,
XX immuno-suppression or treating infection.
PT
XX
XX Claim 11; Page 65; 80pp; English.
PS
XX
XX Sequences shown in AAV41169 to AAV41181 represent antisense
XX oligonucleotides to the RNA component of human telomerase (hTR). These
XX antisense oligonucleotides specifically hybridise to a nucleotide
XX sequence within an accessible region of the hTR, but that does not
XX hybridise to a sequence within the template region of hTR. These
XX oligonucleotides may specifically be used for detection of an RNA
XX component of human telomerase in a sample. This is useful for diagnosing
XX cancer (especially neuroblastoma, bladder, colon and prostate cancer),
XX and providing prognosis for a cancer patient. The inhibitory
XX oligonucleotides can inhibit the telomerase activity level in a cell by
XX interfering with transcription of the RNA component, decreasing the half-
XX life of the telomerase RNA component transcript, inhibiting assembly of
XX the RNA component into the telomerase holoenzyme, or inhibiting the
XX polymerase activity of telomerase. These antisense oligonucleotides can
XX be used for inhibiting telomerase activity in both cultured cells and in
XX cells in vivo. They can be used in therapeutics for treating or
XX preventing cancer, for contraception or sterilisation, for
XX immunosuppression, and for selectively down-regulating specific branches
XX of the immune system, e.g. a specific subset of T-cells, in anti-
XX inflammatory therapies or for treating infections by, e.g. yeast,
XX parasites or fungi
XX
XX Sequence 20 BP; 5 A; 8 C; 3 G; 4 T; 0 U; 0 Other;
SQ
Query Match 4.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.3e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 300 GAAGAGTTGGGCTGTGTGAC 319
DB 20 GAAGAGTTGGGCTGTGTGAC 1
|||||
RESULT 158
AAV41170/c
ID AAV41170 standard; DNA; 20 BP.
XX
XX AAV41170;
AC
XX
XX 08-OCT-1998 (first entry)
DT
XX
XX RNA component of human telomerase (hTR) antisense oligo 14ab.
DE
XX
XX RNA component; human telomerase; antisense oligonucleotide; infection;
XX neuroblastoma; bladder cancer; colon cancer; prostate cancer; cancer;
XX contraception; sterilisation; immunosuppression; therapeutic; hTR;
XX immune system down-regulation; anti-inflammatory therapy; ss.
XX
XX Synthetic.
OS
XX Homo sapiens.
OS
XX WO9828442-A1.
PN

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XX PD 02-JUL-1998.
XX PF 19-DEC-1997; 97WO-US023619.
XX PR 20-DEC-1996; 96US-00770564.
XX PR 20-DEC-1996; 96US-00770565.
XX PA (GERO-) GERON CORP.
XX PI Kim NW, Wu F, Kealey JT, Pruzan R, Weinrich SL;
XX WPI; 1998-377670/32.
XX DR
XX PT New polynucleotide(s) anti-sense to human telomerase - used for detecting
XX PT or inhibiting human telomerase, e.g. for treating cancers, contraception,
XX PT immuno-suppression or treating infection.
XX PS Claim 11; Page 65; 80pp; English.
XX CC
XX CC Sequences shown in AAV41169 to AAV41181 represent antisense
XX CC oligonucleotides to the RNA component of human telomerase (hTR). These
XX CC antisense oligonucleotides specifically hybridise to a nucleotide
XX CC sequence within an accessible region of the hTR, but that does not
XX CC hybridise to a sequence within the template region of hTR. These
XX CC oligonucleotides may specifically be used for detection of an RNA
XX CC component of human telomerase in a sample. This is useful for diagnosing
XX CC cancer (especially neuroblastoma, bladder, colon and prostate cancer),
XX CC and providing prognosis for a cancer patient. The inhibitory
XX CC oligonucleotides can inhibit the telomerase activity level in a cell by
XX CC interfering with transcription of the RNA component, decreasing the half-
XX CC life of the telomerase RNA component transcript, inhibiting assembly of
XX CC the RNA component into the telomerase holoenzyme, or inhibiting the
XX CC polymerase activity of telomerase. These antisense oligonucleotides can
XX CC be used for inhibiting telomerase activity in both cultured cells and in
XX CC cells in vivo. They can be used in therapeutics for treating or
XX CC preventing cancer, for contraception or sterilisation, for
XX CC immunosuppression, and for selectively down-regulating specific branches
XX CC of the immune system, e.g. a specific subset of T-cells, in anti-
XX CC inflammatory therapies or for treating infections by, e.g. yeast,
XX CC parasites or fungi.
XX SQ Sequence 20 BP; 3 A; 7 C; 6 G; 4 T; 0 U; 0 Other;

Query Match 4.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.3e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 290 CTGCCACCGGAGAGTTGG 309
Db 20 CTGCCACCGGAGAGTTGG 1

RESULT 160
AAV41180/C
ID AAV41180 standard; DNA; 20 BP.
XX AC
XX AC AAV41180;
XX DT 08-OCT-1998 (first entry)
XX DE
XX DE RNA component of human telomerase (hTR) antisense oligo 20/21.
XX KW RNA component; human telomerase; antisense oligonucleotide; infection;
XX KW neuroblastoma; bladder cancer; colon cancer; prostate cancer; cancer;
XX KW contraception; sterilisation; immunosuppression; therapeutic; hTR;
XX KW immune system down-regulation; anti-inflammatory therapy; ss.
XX OS Synthetic.
XX OS Homo sapiens.
XX PN WO9828442-A1.
XX XX

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PD 02-JUL-1998.
PF 19-DEC-1997; 97WO-US023619.
PR 20-DEC-1996; 96US-00770564.
PR 20-DEC-1996; 96US-00770565.
PA (GERO-) GERON CORP.
PI Kim NW, Wu F, Kealey JT, Pruzan R, Weinrich SL;
XX WPI; 1998-377670/32.
XX DR
XX PT New polynucleotide(s) anti-sense to human telomerase - used for detecting
XX PT or inhibiting human telomerase, e.g. for treating cancers, contraception,
XX PT immuno-suppression or treating infection.
XX PS Claim 11; Page 65; 80pp; English.
XX CC
XX CC Sequences shown in AAV41169 to AAV41181 represent antisense
XX CC oligonucleotides to the RNA component of human telomerase (hTR). These
XX CC antisense oligonucleotides specifically hybridise to a nucleotide
XX CC sequence within an accessible region of the hTR, but that does not
XX CC hybridise to a sequence within the template region of hTR. These
XX CC oligonucleotides may specifically be used for detection of an RNA
XX CC component of human telomerase in a sample. This is useful for diagnosing
XX CC cancer (especially neuroblastoma, bladder, colon and prostate cancer),
XX CC and providing prognosis for a cancer patient. The inhibitory
XX CC oligonucleotides can inhibit the telomerase activity level in a cell by
XX CC interfering with transcription of the RNA component, decreasing the half-
XX CC life of the telomerase RNA component transcript, inhibiting assembly of
XX CC the RNA component into the telomerase holoenzyme, or inhibiting the
XX CC polymerase activity of telomerase. These antisense oligonucleotides can
XX CC be used for inhibiting telomerase activity in both cultured cells and in
XX CC cells in vivo. They can be used in therapeutics for treating or
XX CC preventing cancer, for contraception or sterilisation, for
XX CC immunosuppression, and for selectively down-regulating specific branches
XX CC of the immune system, e.g. a specific subset of T-cells, in anti-
XX CC inflammatory therapies or for treating infections by, e.g. yeast,
XX CC parasites or fungi.
XX SQ Sequence 20 BP; 3 A; 3 C; 3 G; 11 T; 0 U; 0 Other;

Query Match 4.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.3e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 159 TCTAGACGCAACAAAAATG 178
Db 20 TCTAGACGCAACAAAAATG 1

RESULT 161
AAZ23632/C
ID AAZ23632 standard; DNA; 20 BP.
XX AC
XX AC AAZ23632;
XX DT 07-JAN-2000 (first entry)
XX DE
XX DE Human clone 28-1 telomerase oligonucleotide 14ab.
XX KW Telomerase; human; immune response; cancer; vaccine; treatment; disease;
XX KW primer; ss.
XX OS Synthetic.
XX OS Homo sapiens.
XX PN US5968506-A.
XX XX
XX 19-OCT-1999.
XX 04-APR-1997; 97US-00833377.

```

XX 04-AUG-1995; 95US-00510736.  
XX (GERO-) GERON CORP.  
XX Atkinson EM, Lichtsteiner SP, Weinrich SL, Pruzan RA, Kealey JT;  
XX Vasserot AP;  
XX WPI; 1999-590379/50.  
XX Compositions comprising human telomerase, useful for treating diseases  
XX associated with overexpression of telomerase e.g. cancer.  
XX  
XX Disclosure; Col 45-46; 34pp; English.  
XX  
XX This invention describes a novel composition comprising human telomerase  
XX having at least 2000-fold (preferably at least 6000-fold) increased  
XX relative purity compared with crude extract of cells from adenovirus-  
XX transformed kidney cell line. The composition is useful for eliciting an  
XX immune response in animals and may therefore be used as a vaccine for  
XX treating diseases associated with the overexpression of telomerase e.g.  
XX cancer. AA223626-223637 represent oligonucleotides used in the isolation  
XX of human clone 28-1 which contains a fragment of the human telomerase  
XX described in the method of the invention  
XX  
XX Sequence 20 BP; 0 A; 9 C; 4 G; 7 T; 0 U; 0 Other;  
XX  
XX Query Match 4.4%; Score 20; DB 1; Length 20;  
XX Best Local Similarity 100.0%; Pred. No. 1.3e+02;  
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
XX  
XX QY 361 AGGCCGCGAGGAGGGAACG 380  
XX ||||||||||||||||||  
XX DB 20 AGGCCGCGAGGAGGGAACG 1  
XX  
XX RESULT 162  
XX AA223636/C  
XX ID AA223636 standard; DNA; 20 BP.  
XX AC AA223636;  
XX XX 07-JAN-2000 (first entry)  
XX Human clone 28-1 telomerase oligonucleotide oligo 14ab.  
XX Telomerase; human; immune response; cancer; vaccine; treatment; disease;  
XX primer; ss.  
XX Synthetic.  
XX OS Homo sapiens.  
XX XX Key Location/Qualifiers  
XX modified\_base 1  
XX /\*tag= a  
XX FT /note= "5'-biotinylated cytidine"  
XX  
XX US5968506-A.  
XX  
XX PD 19-OCT-1999.  
XX  
XX 04-APR-1997; 97US-00833377.  
XX  
XX 04-AUG-1995; 95US-00510736.  
XX (GERO-) GERON CORP.  
XX Atkinson EM, Lichtsteiner SP, Weinrich SL, Pruzan RA, Kealey JT;  
XX Vasserot AP;  
XX WPI; 1999-590379/50.  
XX Compositions comprising human telomerase, useful for treating diseases  
XX associated with overexpression of telomerase e.g. cancer.

PT associated with overexpression of telomerase e.g. cancer.  
XX Disclosure; Col 49-50; 34pp; English.  
XX  
XX This invention describes a novel composition comprising human telomerase  
XX having at least 2000-fold (preferably at least 6000-fold) increased  
XX relative purity compared with crude extract of cells from adenovirus-  
XX transformed kidney cell line. The composition is useful for eliciting an  
XX immune response in animals and may therefore be used as a vaccine for  
XX treating diseases associated with the overexpression of telomerase e.g.  
XX cancer. AA223626-223637 represent oligonucleotides used in the isolation  
XX of human clone 28-1 which contains a fragment of the human telomerase  
XX described in the method of the invention  
XX  
XX Sequence 20 BP; 0 A; 9 C; 4 G; 7 T; 0 U; 0 Other;  
XX  
XX Query Match 4.4%; Score 20; DB 1; Length 20;  
XX Best Local Similarity 100.0%; Pred. No. 1.3e+02;  
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
XX  
XX QY 361 AGGCCGCGAGGAGGGAACG 380  
XX ||||||||||||||||||  
XX DB 20 AGGCCGCGAGGAGGGAACG 1  
XX  
XX RESULT 163  
XX AA207301  
XX ID AA207301 standard; DNA; 20 BP.  
XX AC AA207301;  
XX XX 22-OCT-1999 (first entry)  
XX Human telomerase RNA gene (hTR) promoter specific primer H1d.  
XX Telomerase RNA; TR; promoter; cytotoxin; cancer; neoplasia; hTR;  
XX gene therapy; thymidine kinase gene; anticancer therapy; human;  
XX mutagenesis; PCR primer; ss.  
XX Synthetic.  
XX OS Homo sapiens.  
XX XX WO9938964-A2.  
XX PD 05-AUG-1999.  
XX 29-JAN-1999; 99WO-GB000308.  
XX 29-JAN-1998; 98GB-00001902.  
XX (CANC-) CANCER RES CAMPAIGN TECHNOLOGY.  
XX Keith WN;  
XX WPI; 1999-479183/40.  
XX Mouse and human telomerase RNA gene promoters, useful for tumor specific  
XX gene therapy.  
XX Disclosure; Fig 12; 109pp; English.  
XX  
XX The invention relates to promoter regions from mouse and human telomerase  
XX RNA (TR) component genes. The TR gene promoter can be linked to a  
XX heterologous gene, especially a gene encoding a cytotoxin, for therapy of  
XX cancer, especially neoplasias. The telomerase is necessary for the  
XX unrestricted proliferative capacity of many human cancers. Mutation or  
XX dysregulation of the telomerase repression pathway may cause reactivation  
XX or upregulation of telomerase expression in cancer. Substances,  
XX identified in the methods, can be used to block transcription from the TR  
XX gene promoter through interaction of the 5' regulatory sequences. These  
XX substances, e.g. antisense oligonucleotides, transcription factors, are  
XX peptide nucleic acids and factors that disrupt signal transduction, are  
XX useful for cancer therapy. In particular, gene therapy vectors



CC (especially pGT62-codAupp) comprising the promoter and a viral thymidine  
 CC kinase gene can be used to convert a prodrug, e.g. gancyclovir, so that  
 CC neoplasia can be controlled or treated. Direct down-regulation of  
 CC telomerase RNA gene through manipulation of transcription factors may be  
 CC effective anticancer therapy and the cloning of the hTR gene promoter  
 CC allows the analysis of therapeutic molecules which modulate hTR promoter  
 CC activity. Sequences AA207696-121 represent PCR primers used in cloning  
 CC and mutagenesis of human TR gene (hTR) promoter region  
 XX  
 SQ Sequence 20 BP; 1 A; 4 C; 12 G; 3 T; 0 U; 0 Other;  
 Query Match 4.4%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 1.3e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Y 17 GCCTGGGAGGGGTGGTGGCC 36  
 D 1 GCCTGGGAGGGGTGGTGGCC 20  
 RESULT 164  
 AA207275  
 ID AA207275 standard; DNA; 20 BP.  
 XX  
 AC AA207275;  
 XX  
 DT 22-OCT-1999 (first entry)  
 XX  
 DE Human telomerase RNA gene (hTR) specific primer hTRe.  
 XX  
 KW Telomerase RNA; TR; promoter; cytotoxin; cancer; neoplasia; hTR;  
 KW gene therapy; thymidine kinase gene; anticancer therapy; human;  
 KW PCR primer; ss.  
 XX  
 OS Synthetic.  
 OS Homo sapiens.  
 XX  
 FN WO9938964-A2.  
 XX  
 PD 05-AUG-1999.  
 XX  
 XX 29-JAN-1999; 99WO-GB000308.  
 PF  
 XX 29-JAN-1998; 98GB-00001902.  
 PR  
 XX (CANC-) CANCER RES CAMPAIGN TECHNOLOGY.  
 PA  
 XX Keith WN;  
 PI  
 XX WPI; 1999-479183/40.  
 DR  
 XX Mouse and human telomerase RNA gene promoters, useful for tumor specific  
 PT gene therapy.  
 XX  
 XX Disclosure; Fig 6; 109pp; English.  
 XX  
 CC The invention relates to promoter regions from mouse and human telomerase  
 CC RNA (TR) component genes. The TR gene promoter can be linked to a  
 CC heterologous gene, especially a gene encoding a cytotoxin, for therapy of  
 CC cancer, especially neoplasias. The telomerase is necessary for the  
 CC unrestricted proliferative capacity of many human cancers. Mutation or  
 CC dysregulation of the telomerase repression pathway may cause reactivation  
 CC or upregulation of telomerase expression in cancer. Substances,  
 CC identified in the methods, can be used to block transcription from the TR  
 CC gene promoter through interaction of the 5' regulatory sequences. These  
 CC substances, e.g. antisense oligonucleotides, transcription factors, are  
 CC peptide nucleic acids and factors that disrupt signal transduction, are  
 CC useful for cancer therapy. In particular, gene therapy vectors  
 CC (especially pGT62-codAupp) comprising the promoter and a viral thymidine  
 CC kinase gene can be used to convert a prodrug, e.g. gancyclovir, so that  
 CC neoplasia can be controlled or treated. Direct down-regulation of  
 CC telomerase RNA gene through manipulation of transcription factors may be  
 CC effective anticancer therapy and the cloning of the hTR gene promoter

CC allows the analysis of therapeutic molecules which modulate hTR promoter  
 CC activity. Sequences AA207623-80 represents PCR primers for amplifying  
 CC human TR gene (hTR) promoter sequence  
 XX  
 SQ Sequence 20 BP; 3 A; 5 C; 8 G; 4 T; 0 U; 0 Other;  
 Query Match 4.4%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 1.3e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Y 410 CTGAGCTGTGGACGTGCAC 429  
 D 1 CTGAGCTGTGGACGTGCAC 20  
 RESULT 165  
 AAA37583/C  
 ID AAA37583 standard; DNA; 20 BP.  
 XX  
 AC AAA37583;  
 XX  
 DT 15-AUG-2000 (first entry)  
 XX  
 DE PNA sequence #41 used to inhibit telomerase activity.  
 XX  
 KW Peptide nucleic acid; PNA; telomerase; ribonucleoprotein enzyme; cancer;  
 KW inhibitor; neoplasia; neurodegenerative disease; aging; hyperplasia;  
 KW AIDS; HIV; fungal infection; forensic identification; detect; tumour;  
 KW paternity testing; ss.  
 XX  
 OS Synthetic.  
 OS  
 FH Key Location/Qualifiers  
 FT misc\_feature 1..20  
 FT /\*tag= a  
 FT /note= "Peptide nucleic acid molecule, where N-(2-  
 FT aminoethyl)glycine units are linked to nucleotide bases  
 FT via glycine amino N through a methylenecarbonyl linker"  
 XX  
 FN US046307-A.  
 PD 04-APR-2000.  
 XX  
 PF 09-APR-1997; 97US-00838545.  
 XX  
 PR 09-APR-1996; 96US-00630019.  
 XX  
 XX (TEXA ) UNIV TEXAS SYSTEM.  
 XX  
 PI Wright WE, Piatyszek MA, Shay JW, Norton JC, Corey DR;  
 XX WPI; 2000-292432/25.  
 DR  
 XX New peptide nucleic acid (PNA) compounds that inhibit telomerase activity  
 PT in mammalian cells is useful as probes to detect the RNA component of a  
 PT mammalian telomerase.  
 XX  
 PS Example 1; Col 27-28; 45pp; English.  
 XX  
 CC The present sequence represents a peptide nucleic acid molecule which  
 CC hybridises to the mRNA component of mammalian telomerase, and inhibits  
 CC telomerase activity. Telomerase is a ribonucleoprotein enzyme that  
 CC synthesizes one strand of the telomeric DNA, using as a template an 11  
 CC nucleotide sequence contained within the RNA component of the enzyme. The  
 CC invention relates to PNA molecules having a sequence of no more than 25  
 CC bases, which include the sequence GTTAGG. The uncharged nature of the PNA  
 CC backbone increases the melting temperature of associating strands,  
 CC increases the rate of association with targeted nucleic acids, and  
 CC affords greater resistance of degradation by proteases or nucleases. The  
 CC therapeutic PNAs may be used for treating disease conditions such as  
 CC cancers, neoplasia, hyperplasia, neurodegenerative diseases, aging, human  
 CC immunodeficiency virus (HIV) infection/AIDS (acquired immunodeficiency  
 CC syndrome) and associated pathologies, fungal infections, and other

CC diseases characterized by abnormal telomere metabolism or telomerase  
 CC activity, in combination with antineoplastic and other cytotoxic or  
 CC cytosstatic agents, antifungal agents, and other nucleotides. PNAs may be  
 CC used for molecular diagnostics, labelled PNAs are used as hybridization  
 CC probes to detect or quantitate polynucleotides having a human telomerase  
 CC RNA (hTR) sequence. PNA probes are also used for forensic identification  
 CC of individuals, e.g. paternity testing, based on hTR gene restriction  
 CC fragment length polymorphism (RFLP) pattern. PNAs are also useful as  
 CC probes to detect the RNA component of a mammalian telomerase and as  
 CC inhibitors of telomerase activity. The method of the present invention  
 CC allows cancerous conditions to be detected with increased confidence and  
 CC possibly at an earlier stage, before cells are detected as cancerous  
 CC based on pathological characteristics. The diagnostic and prognostic  
 CC methods of the present invention can be used to detect an immortal or  
 CC neoplastic cell or tumour tissue or cancer of any origin, provided the  
 CC cell expresses telomerase activity and its RNA component

XX  
 SQ Sequence 20 BP; 3 A; 5 C; 5 G; 7 T; 0 U; 0 Other;

Query Match 4.4%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 1.3e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 46 CTAACCCCTAACTGAGAAGGG 65  
 Db 20 CTAACCCCTAACTGAGAAGGG 1  
 |||||

RESULT 166  
 AAS15454/c  
 ID AAS15454 standard; DNA; 20 BP.  
 XX AC AAS15454;  
 XX 14-FEB-2002 (first entry)  
 DE PNA VIII inhibiting human and mammalian telomerase activity.  
 KW Mammalian; peptide nucleic acid; probe; forensic; paternity testing;  
 KW human telomerase RNA component; hTR gene RFLP pattern; cancer;  
 KW inflammation; lymphoproliferative disease; autoimmune disease;  
 KW neurodegenerative disease; neoplasia; hyperplasia; HIV; AIDS;  
 KW human immunodeficiency virus; acquired immunodeficiency syndrome;  
 KW telomere metabolism; mutant; cytostatic; anti-inflammatory;  
 KW immunosuppressive; polyamide backbone; ss.  
 XX Homo sapiens.  
 OS Synthetic.  
 XX Key Location/Qualifiers  
 FH modified\_base 1..20  
 FT /\*tag= a  
 FT /note= "This sequence is a peptide nucleic acid, i.e. it  
 FT contains a polyamide backbone instead of a deoxyribose  
 FT backbone"

US6294650-B1.  
 XX  
 XX 25-SEP-2001.  
 XX 08-JUL-1999; 99US-00349532.  
 XX 09-APR-1996; 96US-00630019.  
 XX 09-APR-1997; 97US-00838545.  
 XX (TEXA ) UNIV TEXAS SYSTEM.  
 XX Shay JW, Wright WE, Piatyszek MA, Corey DR, Norton JC;  
 XX WPI; 2001-638024/73.  
 XX New peptide nucleic acids that hybridizes to the RNA component of  
 XX mammalian telomerase, useful for treating or preventing cancer,

PT inflammation, lymphoproliferative diseases, autoimmune disease, or  
 PT neurodegenerative diseases.  
 XX Example 1; Col 29; 46pp; English.  
 PS  
 XX The present invention relates to peptide nucleic acids (PNAs), comprising  
 CC a sequence of 6-25 nucleobases, that inhibit telomerase activity in  
 CC mammalian cells by hybridising to the RNA component of mammalian  
 CC telomerase. The PNAs are useful as probes to detect the RNA component of  
 CC mammalian telomerase and as inhibitors of telomerase activity, or to  
 CC detect and/or quantitate polynucleotide having the human telomerase RNA  
 CC component (hTR) sequence, as well as in forensic identification of  
 CC individuals, such as paternity testing or identification of criminal  
 CC suspects or unknown descendants based on the hTR gene RFLP pattern. The  
 CC PNA can be further used for treating or preventing cancer, inflammation,  
 CC lymphoproliferative diseases, autoimmune disease, or neurodegenerative  
 CC diseases. The PNAs in combination with other pharmaceuticals (such as  
 CC antineoplastic or cytostatic agents) can be used for treating neoplasia,  
 CC hyperplasia, human immunodeficiency virus (HIV) infections, acquired  
 CC immunodeficiency syndrome (AIDS) and associated pathologies, and other  
 CC diseases characterised by abnormal telomere metabolism or telomerase  
 CC activity. The present sequence represents one of the PNA sequences of the  
 CC invention

XX SQ Sequence 20 BP; 3 A; 5 C; 5 G; 7 T; 0 U; 0 Other;

Query Match 4.4%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 1.3e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 46 CTAACCCCTAACTGAGAAGGG 65  
 Db 20 CTAACCCCTAACTGAGAAGGG 1  
 |||||

RESULT 167  
 AAS15934/c  
 ID AAS15934 standard; DNA; 20 BP.  
 XX AC AAS15934;  
 XX 27-FEB-2002 (first entry)  
 DT Human telomerase polynucleotide inhibitor #15.  
 XX Human; telomerase; hTR; cytostatic; anti-inflammatory; adenocarcinoma;  
 KW breast; prostate; colon; mixed cell leukaemia; Hodgkin's disease;  
 KW fertility; inflammatory condition; tumour; cancer; veterinary;  
 KW immunosuppression; telomerase inhibitor; ss.  
 XX Homo sapiens.  
 OS Synthetic.  
 XX Key Location/Qualifiers  
 FH modified\_base 1..20  
 FT /\*tag= a  
 FT /mod\_base= OTHER  
 FT /note= "N3'-p5' phosphoramidate linkages"

WO200174136-A2.  
 XX  
 XX 11-OCT-2001.  
 XX 30-MAR-2001; 2001WO-US010476.  
 XX 31-MAR-2000; 2000US-00540119.  
 XX (GERO-) GERON CORP.  
 XX Gryaznov SM, Pruzan R, Weinrich SL;  
 XX WPI; 2001-656955/75.

PT New polynucleotide useful for inhibiting telomerase activity in cells, or  
 PT for treating telomerase-mediated condition or disease, such as cancers,  
 PT tumors, Hodgkin's disease, or inflammatory conditions.

XX Claim 8; Page 36; 48pp; English.

CC The invention relates to polynucleotide inhibitors (I) and methods for  
 CC inhibiting telomerase activity. (I) are useful in inhibiting telomerase  
 CC activity and proliferation of a telomerase positive cell, and in  
 CC manufacturing a medicament for inhibiting telomerase activity in a cell  
 CC and in treating telomerase-mediated condition or disease, such as  
 CC adenocarcinoma of breast, prostate or colon, mixed cell leukaemia,  
 CC Hodgkin's disease, fertility and inflammatory conditions. (I) are also  
 CC useful in treating a tumour or in manufacturing a medicament for the  
 CC treatment of tumour. The polynucleotide inhibitors may also be used in  
 CC diagnostic assays for detecting RNA or DNA. Inhibition of telomerase  
 CC activity in cells in vivo is useful in prophylactic and therapeutic  
 CC methods of treating cancer and other disorders involving inappropriate  
 CC expression of telomerase, and in treating veterinary proliferative  
 CC diseases. Inhibition of telomerase in haematopoietic stem cells is useful  
 CC for immunosuppression and for selectively down-regulating specific  
 CC branches of the immune system. The present sequence represents human  
 CC telomerase polynucleotide inhibitor #15, as described in the method of  
 CC the invention

XX SQ Sequence 20 BP; 3 A; 3 C; 3 G; 11 T; 0 U; 0 Other;

Query Match 4.4%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 1.3e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 160 CTAGAGCAACAAAAATGT 179  
 |||||  
 Db 20 CTAGAGCAACAAAAATGT 1

RESULT 168

AAS09477/c  
 ID AAS09477 standard; DNA; 20 BP.

XX AC AAS09477;

XX DT 24-OCT-2001 (first entry)

XX DE Antisense oligonucleotide for human telomerase, Oligo 14ab #1.  
 XX Human; Telomerase; vaccine; antibody; cancer; EF2H; nucleolin;  
 KW antisense oligonucleotide; Oligo 14ab; ss.

XX OS Homo sapiens.

XX PN US6261556-B1.

XX PD 17-JUL-2001.

XX PF 18-OCT-1999; 99US-00420056.

XX PR 04-AUG-1995; 95US-00510736.

XX PR 04-APR-1997; 97US-00833377.

XX PR (GERO-) GERON CORP.

XX PI Weinrich SL, Atkinson EM, Lichtsteiner SP, Vasserot AP, Pruzan RA;  
 PI Kealey JT;

XX DR WPI; 2001-450477/48.

XX PT Purified human telomerase, useful for inducing immune response in  
 PT animals, comprises several thousand folds increased purity compared with  
 PT cytoplasmic crude cell preparations.

XX PS Disclosure; Col 2; 29pp; English.

XX CC

CC The sequence represents an antisense oligonucleotide used in the  
 CC purification of human telomerase. The invention relates to a purified  
 CC human telomerase core enzyme protein comprising 2000-fold increased  
 CC purity compared with a crude extract of cells from adenovirus-transformed  
 CC kidney cell line (293 cells) and when associated with telomerase RNA  
 CC component has DNA polymerase activity and a molecular weight of 200-2000  
 CC kilo daltons (kDa). The purified telomerase is useful for inducing a  
 CC humoral or cell-mediated immune response in an animal. Purified  
 CC telomerase or immunogenic fragments are useful as vaccines for treating  
 CC diseases associated with over-expression of telomerase, such as cancer  
 CC and for producing antibodies that recognize telomerase, which are useful  
 CC as affinity agents in isolating the proteins and for detecting the  
 CC presence of proteins in a sample, such as cell or tissue. Identification  
 CC of telomerase aids in diagnosis of cancer or pre-cancerous states.  
 CC Telomerase and/or telomerase associated proteins are also useful for  
 CC screening compounds to identify agents that alter the association of  
 CC telomerase-associated proteins, such as nucleolin or EF2H with telomerase

XX SQ Sequence 20 BP; 0 A; 9 C; 4 G; 7 T; 0 U; 0 Other;

Query Match 4.4%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 1.3e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 361 AGCCGCGAGGAGGGAACG 380  
 |||||  
 Db 20 AGCCGCGAGGAGGGAACG 1

RESULT 169

AAS09480/c  
 ID AAS09480 standard; DNA; 20 BP.

XX AC AAS09480;

XX DT 24-OCT-2001 (first entry)

XX DE Antisense oligonucleotide for human telomerase, Oligo 14ab #2.  
 XX Human; Telomerase; vaccine; antibody; cancer; EF2H; nucleolin;  
 KW antisense oligonucleotide; Oligo 14ab; ss.

XX OS Homo sapiens.

XX FH Key Location/Qualifiers  
 XX modified\_base 1  
 FT /\*tag= a  
 FT /mod\_base= C  
 FT /note= "C is biotinylated"

XX PN US6261556-B1.

XX PD 17-JUL-2001.

XX PF 18-OCT-1999; 99US-00420056.

XX PR 04-AUG-1995; 95US-00510736.

XX PR 04-APR-1997; 97US-00833377.

XX PR (GERO-) GERON CORP.

XX PI Weinrich SL, Atkinson EM, Lichtsteiner SP, Vasserot AP, Pruzan RA;  
 PI Kealey JT;

XX DR WPI; 2001-450477/48.

XX PT Purified human telomerase, useful for inducing immune response in  
 PT animals, comprises several thousand folds increased purity compared with  
 PT cytoplasmic crude cell preparations.

XX PS Disclosure; Col 18; 29pp; English.

XX CC The sequence represents a biotinylated antisense oligonucleotide used in

CC the purification of human telomerase. The invention relates to a purified  
CC human telomerase core enzyme protein comprising 2000-fold increased  
CC purity compared with a crude extract of cells from adenovirus-transformed  
CC kidney cell line (293 cells) and when associated with telomerase RNA  
CC component has DNA polymerase activity and a molecular weight of 200-2000  
CC kilo Daltons (kDa). The purified telomerase is useful for inducing a  
CC humoral or cell-mediated immune response in an animal. Purified  
CC telomerase or immunogenic fragments are useful as vaccines for treating  
CC diseases associated with over-expression of telomerase, which are useful  
CC and for producing antibodies that recognize telomerase, which are useful  
CC as affinity agents in isolating the proteins and for detecting the  
CC presence of proteins in a sample, such as cell or tissue. Identification  
CC of telomerase aids in diagnosis of cancer or pre-cancerous states.  
CC Telomerase and/or telomerase associated proteins are also useful for  
CC screening compounds to identify agents that alter the association of  
CC telomerase-associated proteins, such as nucleolin or EP2H with telomerase  
XX  
SQ Sequence 20 BP; 0 A; 9 C; 4 G; 7 T; 0 U; 0 Other;  
Query Match 4.4%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.3e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 361 AGCCCGCAGGAAGGAAACG 380  
DB 20 AGCCCGCAGGAAGGAAACG 1  
RESULT 170  
AAC64999  
ID AAC64999 standard; DNA; 20 BP.  
XX  
AC AAC64999;  
XX  
DT 23-MAR-2001 (first entry)  
XX  
DE Human telomerase PCR primer #2.  
XX  
KW Telomerase; cancer; telomere damage; PCR primer; ss.  
XX  
OS Homo sapiens.  
XX  
FN WO200074667-A2.  
XX  
PD 14-DEC-2000.  
XX  
PP 05-JUN-2000; 2000WO-US015544.  
XX  
PR 04-JUN-1999; 99US-0137549P.  
XX  
PA (AUJL/) AU J L.  
PA (WIEN/) WIENTJES G.  
XX  
PI Au JL, Wientjes G;  
XX  
DR WPI; 2001-071022/08.  
XX  
PT Inhibiting or reducing growth of cell for treating cancer, comprising  
PT administering telomere damage-inducing agent and telomerase inhibitory  
PT agent to the cell.  
XX  
PS Example 7; Page 62; 97pp; English.  
XX  
SS The present invention provides a method for inhibiting or reducing the  
CC growth of a cell which involves administering to the cell a telomere  
CC damage inducing agent and a telomerase inhibitory agent. This can be used  
CC in the treatment of aberrant cell growth, including cancers  
XX  
SQ Sequence 20 BP; 1 A; 3 C; 12 G; 4 T; 0 U; 0 Other;  
Query Match 4.4%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.3e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 GGGTTGCGAGGGTGGGCT 20  
DB 1 GGGTTGCGAGGGTGGGCT 20  
RESULT 171  
AAV68462/c  
ID AAV68462 standard; DNA; 19 BP.  
XX  
AC AAV68462;  
XX  
DT 22-MAR-1999 (first entry)  
XX  
DE Human telomerase RNA (hTR) component antisense oligonucleotide.  
XX  
KW Human; telomerase; hTR; activator-antisense complex; malignant; enzyme;  
KW cleave; brain; tumour malignant glioma; breast tumour; renal cell cancer;  
KW melanoma; prostate cancer; leukemia; polycythemia vera; myeloma; sarcoma;  
KW Hodgkin's lymphoma; Waldenstrom's macroglobulinemia; heavy chain disease;  
KW carcinoma; chemotherapeutic; antisense; ss.  
XX  
OS Synthetic.  
OS Homo sapiens.  
XX  
FN WO9847911-A1.  
XX  
PD 29-OCT-1998.  
XX  
PP 13-APR-1998; 98WO-US007397.  
XX  
PR 21-APR-1997; 97US-0044507P.  
PR 03-FEB-1998; 98US-00018125.  
XX  
PA (CLEV-) CLEVELAND CLINIC FOUND.  
PA (USLV) US NAT INST OF HEALTH.  
XX  
PI Silverman RH, Kondo S, Cowell JK, Li G, Torrence PF;  
DR WPI; 1998-609972/51.  
XX  
PT New RNase L activator-telomerase antisense complex - useful to inhibit  
PT telomerase activity in telomerase-expressing malignancies.  
XX  
PS Claim 4; Page 54; 81pp; English.  
XX  
SS This represents an antisense oligonucleotide to the RNA component of  
CC human telomerase (hTR). The invention relates to an activator-antisense  
CC complex that comprises: (a) an antisense oligonucleotide, complementary  
CC to a 12-25 nucleotide portion of hTR, with a hydroxyl moiety at the first  
CC end; and (b) a linker attached to the first end, and (c) an activator of  
CC RNase L attached to the linker. The activator-antisense complex may be  
CC used for inhibiting the growth of a telomerase-expressing malignant cell  
CC or tumour. The complex is used to specifically cleave the ribonucleotide  
CC portion of a telomerase enzyme. The complex inhibits growth of telomerase  
CC expressing malignant cells from brain tumour malignant glioma, breast  
CC tumour, renal cell cancer, melanoma, and prostate cancer. Many other  
CC malignancies and related disorders, may be treated including various  
CC acute and chronic leukemias, polycythemia vera, Hodgkin's and non-  
CC Hodgkin's lymphomas, multiple myeloma, Waldenstrom's macroglobulinemia,  
CC heavy chain disease, and solid tumours, including numerous sarcomas and  
CC carcinomas. The complex is preferably administered in combination with a  
CC chemotherapeutic agent, particularly either cisplatin, doxorubicin,  
CC mitomycin, daunorubicin, bleomycin, actinomycin D, or neocarzinostatin  
XX  
SQ Sequence 19 BP; 6 A; 5 C; 8 G; 0 T; 0 U; 0 Other;  
Query Match 4.2%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 1.5e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 76 GTGCTTTTGTCCCGCGC 94  
|||||

Db 19 GTGCTTTTGCTCCCGCGC 1

RESULT 172  
AAV41176/c  
ID AAV41176 standard; DNA; 19 BP.  
XX  
AC AAV41176;  
XX  
DT 08-OCT-1998 (first entry)  
XX  
DE RNA component of human telomerase (hTR) antisense oligo 21ab.  
XX  
KW RNA component; human telomerase; antisense oligonucleotide; infection;  
KW neuroblastoma; bladder cancer; colon cancer; prostate cancer; cancer;  
KW contraception; sterilisation; immunosuppression; therapeutic; hTR;  
KW immune system down-regulation; anti-inflammatory therapy; ss.  
XX  
OS Synthetic.  
OS Homo sapiens.  
XX  
PN WO9828442-A1.  
XX  
PD 02-JUL-1998.  
XX  
PF 19-DEC-1997; 97WO-US023619.  
XX  
PR 20-DEC-1996; 96US-00770564.  
PR 20-DEC-1996; 96US-00770565.  
XX  
PA (GERO-) GERON CORP.  
XX  
PI Kim NW, Wu F, Kealey JT, Pruzan R, Weinrich SL;  
PI WPI; 1998-377670/32.  
DR  
XX New polynucleotide(a) anti-sense to human telomerase - used for detecting  
PT or inhibiting human telomerase, e.g. for treating cancers, contraception,  
PT immuno-suppression or treating infection.  
XX  
PS Claim 11; Page 65; 80pp; English.  
XX  
CC Sequences shown in AAV41169 to AAV41181 represent antisense  
CC oligonucleotides to the RNA component of human telomerase (hTR). These  
CC antisense oligonucleotides specifically hybridise to a nucleotide  
CC sequence within an accessible region of the hTR, but that does not  
CC hybridise to a sequence within the template region of hTR. These  
CC oligonucleotides may specifically be used for detection of an RNA  
CC component of human telomerase in a sample. This is useful for diagnosing  
CC cancer (especially neuroblastoma, bladder, colon and prostate cancer),  
CC and providing prognosis for a cancer patient. The inhibitory  
CC oligonucleotides can inhibit the telomerase activity level in a cell by  
CC interfering with transcription of the RNA component, decreasing the half-  
CC life of the telomerase RNA component transcript, inhibiting assembly of  
CC the RNA component into the telomerase holoenzyme, or inhibiting the  
CC polymerase activity of telomerase. These antisense oligonucleotides can  
CC be used for inhibiting telomerase activity in both cultured cells and in  
CC cells in vivo. They can be used in therapeutics for treating or  
CC preventing cancer, for contraception or sterilisation, for  
CC immunosuppression, and for selectively down-regulating specific branches  
CC of the immune system, e.g. a specific subset of T-cells, in anti-  
CC inflammatory therapies or for treating infections by, e.g. yeast,  
CC parasites or fungi  
XX  
SQ Sequence 19 BP; 5 A; 3 C; 7 G; 4 T; 0 U; 0 Other;  
Query Match 4.2%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 1.5e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Qy 148 CCACCGTTCATTCTAGAC 166  
|||||||  
19 CCACCGTTCATTCTAGAC 1  
Db

RESULT 173  
AAA37602  
ID AAA37602 standard; RNA; 19 BP.  
XX  
AC AAA37602;  
XX  
DT 15-AUG-2000 (first entry)  
XX  
DE Telomerase target sequence.  
XX  
KW Peptide nucleic acid; PNA; telomerase; ribonucleoprotein enzyme; cancer;  
KW inhibitor; neoplasia; neurodegenerative disease; aging; hyperplasia;  
KW AIDS; HIV; fungal infection; forensic identification; detect; tumour;  
KW paternity testing; ss.  
XX  
OS Synthetic.  
OS US6046307-A.  
XX  
PN 04-APR-2000.  
XX  
PD 09-APR-1997; 97US-00838545.  
XX  
PF 09-APR-1996; 96US-00630019.  
PR (TEXA ) UNIV TEXAS SYSTEM.  
XX  
PI Wright WE, Piatyszek MA, Shay JW, Norton JC, Corey DR;  
PI WPI; 2000-292432/25.  
DR  
XX New peptide nucleic acid (PNA) compounds that inhibit telomerase activity  
PT in mammalian cells is useful as probes to detect the RNA component of a  
PT mammalian telomerase.  
XX  
PS Example 2; Col 37; 45pp; English.  
XX  
CC The present sequence represents a telomerase target sequence. The  
CC invention relates to an antisense oligonucleotide used as a control  
CC sequence alongside a peptide nucleic acid molecule which hybridises to  
CC the mRNA component of mammalian telomerase, and inhibits telomerase  
CC activity. Telomerase is a ribonucleoprotein enzyme that synthesizes one  
CC strand of the telomeric DNA, using as a template an 11 nucleotide  
CC sequence contained within the RNA component of the enzyme. The invention  
CC relates to PNA molecules having a sequence of no more than 25 bases,  
CC which include the sequence GTTAGG. The uncharged nature of the PNA  
CC backbone increases the melting temperature of associating strands,  
CC increases the rate of association with targeted nucleic acids, and  
CC affords greater resistance of degradation by proteases or nucleases. The  
CC therapeutic PNAs may be used for treating disease conditions such as  
CC cancers, neoplasia, hyperplasia, neurodegenerative diseases, aging, human  
CC immunodeficiency virus (HIV) infection/AIDS (acquired immunodeficiency  
CC syndrome) and associated pathologies, fungal infections, and other  
CC diseases characterized by abnormal telomere metabolism or telomerase  
CC activity, in combination with antineoplastic and other cytotoxic or  
CC cytostatic agents, antifungal agents, and other nucleotides. PNAs may be  
CC used for molecular diagnostics, labelled PNAs are used as hybridization  
CC probes to detect or quantitate polynucleotides having a human telomerase  
CC RNA (hTR) sequence. PNA probes are also used for forensic identification  
CC of individuals, e.g. paternity testing, based on hTR gene restriction  
CC fragment length polymorphism (RFLP) pattern. PNAs are also useful as  
CC probes to detect the RNA component of a mammalian telomerase and as  
CC inhibitors of telomerase activity. The method of the present invention  
CC allows cancerous conditions to be detected with increased confidence and  
CC possibly at an earlier stage, before cells are detected as cancerous  
CC based on pathological characteristics. The diagnostic and prognostic  
CC methods of the present invention can be used to detect an immortal or  
CC neoplastic cell or tumour tissue or cancer of any origin, provided the  
CC cell expresses telomerase activity and its RNA component  
XX  
SQ Sequence 19 BP; 7 A; 5 C; 3 G; 0 T; 4 U; 0 Other;



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RESULT 176
ADF93303
ID ADF93303 standard; RNA; 19 BP.
XX
XX
AC ADF93303;
XX
XX
DT 26-FEB-2004 (first entry)
XX
XX
DE Human TERC transcript target sequence/siNA upper strand, SEQ ID 20.
XX
XX
KW Cytostatic; vasotropic; protozoacide; immunosuppressive; dermatological;
KW neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;
KW antiarthritic; antiinflammatory; gene therapy; telomerase; human; terc;
KW RNA interference; short interfering nucleic acid; siNA;
KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;
KW short hairpin RNA; shRNA; expression modulation; gene therapy;
KW drug screening; diagnosis; therapeutic target identification;
KW pharmacogenomics; gene function analysis; gene mapping; TERC; TERT; ss.
XX
XX
OS Homo sapiens.
XX
XX
PN WO2003070742-A1.
XX
XX
PD 28-AUG-2003.
XX
XX
PF 11-FEB-2003; 2003WO-US004088.
XX
XX
PR 20-FEB-2002; 2002US-0358580P.
PR 11-MAR-2002; 2002US-0363124P.
PR 06-JUN-2002; 2002US-0386782P.
PR 17-JUL-2002; 2002US-0396600P.
PR 29-AUG-2002; 2002US-0406784P.
PR 05-SEP-2002; 2002US-0408378P.
PR 09-SEP-2002; 2002US-0409233P.
PR 15-JAN-2003; 2003US-0440129P.
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PA (RIBO-) RIBOZYME PHARM INC.
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PI Mcswiggen J, Beigelman L;
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XX WPI; 2003-689777/65.
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XX
PT New short interfering nucleic acid downregulates expression of the
PT telomerase gene useful e.g. for treatment and diagnosis of cancer.
XX
XX
PS Example 3; SEQ ID NO 20; 145pp; English.
XX
XX
CC The invention relates to short interfering nucleic acids (siNA) which
CC downregulate expression of the one or more telomerase genes by RNA
CC interference. The siNAs may or may not comprise ribonucleotides and may
CC be double or single stranded. They further comprise sense and antisense
CC regions, or alternatively are assembled from a sense oligonucleotide and
CC an antisense oligonucleotide. Specifically, the siNAs include short
CC interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short
CC hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,
CC can contain deoxyribonucleotides, and can be chemically synthesised,
CC expressed from a vector or enzymatically synthesised. The invention also
CC relates to kits for the in vitro or in vivo delivery of siNA; conjugates
CC and/or complexes of siNA; and vectors that express siNA. The siNAs are
CC used to modulate expression of the telomerase genes in cells, tissue
CC explants or organisms (e.g., by ex vivo gene therapy), or in grafts and
CC transplants for the treatment of a variety of conditions. They may be
CC used for treating cancer, restenosis, infectious diseases (specifically
CC protozoal), transplant rejection, or autoimmune or age-related diseases,
CC e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,
CC skin ulcers and rheumatoid arthritis. The siNAs are also useful for drug
CC screening, diagnosis, therapeutic target identification and validation,
CC genetic engineering, pharmacogenomics, studying gene function, and gene
CC mapping (e.g., of single nucleotide polymorphisms). The present sequence
CC represents the upper strand of a human TERC-targeted double-stranded
CC siNA, which is identical to the c-fos transcript target sequence.
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XX
SQ Sequence 19 BP; 1 A; 7 C; 9 G; 0 T; 2 U; 0 Other;
Query Match 4.2%; Score 19; DB 1; Length 19;
Best Local Similarity 89.5%; Pred. No. 1.5e+02;
Matches 17; Conservative 2; Mismatches 0; Indels 0; Gaps 0;
Qy 248 CTGAGGCGCGGTGCGCC 266
Db 1 CUGAGGCGCGGTGCGCC 19
RESULT 177
ADF93307
ID ADF93307 standard; RNA; 19 BP.
XX
XX
AC ADF93307;
XX
XX
DT 26-FEB-2004 (first entry)
XX
XX
DE Human TERC transcript target sequence/siNA upper strand, SEQ ID 24.
XX
XX
KW Cytostatic; vasotropic; protozoacide; immunosuppressive; dermatological;
KW neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;
KW antiarthritic; antiinflammatory; gene therapy; telomerase; human; terc;
KW RNA interference; short interfering nucleic acid; siNA;
KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;
KW short hairpin RNA; shRNA; expression modulation; gene therapy;
KW drug screening; diagnosis; therapeutic target identification;
KW pharmacogenomics; gene function analysis; gene mapping; TERC; TERT; ss.
XX
XX
OS Homo sapiens.
XX
XX
PN WO2003070742-A1.
XX
XX
PD 28-AUG-2003.
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PF 11-FEB-2003; 2003WO-US004088.
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PR 20-FEB-2002; 2002US-0358580P.
PR 11-MAR-2002; 2002US-0363124P.
PR 06-JUN-2002; 2002US-0386782P.
PR 17-JUL-2002; 2002US-0396600P.
PR 29-AUG-2002; 2002US-0406784P.
PR 05-SEP-2002; 2002US-0408378P.
PR 09-SEP-2002; 2002US-0409233P.
PR 15-JAN-2003; 2003US-0440129P.
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XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
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PI Mcswiggen J, Beigelman L;
XX
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XX WPI; 2003-689777/65.
XX
XX
PT New short interfering nucleic acid downregulates expression of the
PT telomerase gene useful e.g. for treatment and diagnosis of cancer.
XX
XX
PS Example 3; SEQ ID NO 24; 145pp; English.
XX
XX
CC The invention relates to short interfering nucleic acids (siNA) which
CC downregulate expression of the one or more telomerase genes by RNA
CC interference. The siNAs may or may not comprise ribonucleotides and may
CC be double or single stranded. They further comprise sense and antisense
CC regions, or alternatively are assembled from a sense oligonucleotide and
CC an antisense oligonucleotide. Specifically, the siNAs include short
CC interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short
CC hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,
CC can contain deoxyribonucleotides, and can be chemically synthesised,
CC expressed from a vector or enzymatically synthesised. The invention also
CC relates to kits for the in vitro or in vivo delivery of siNA; conjugates
CC and/or complexes of siNA; and vectors that express siNA. The siNAs are
CC used to modulate expression of the telomerase genes in cells, tissue
CC explants or organisms (e.g., by ex vivo gene therapy), or in grafts and
CC transplants for the treatment of a variety of conditions. They may be
CC used for treating cancer, restenosis, infectious diseases (specifically
CC protozoal), transplant rejection, or autoimmune or age-related diseases,
CC e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,
CC skin ulcers and rheumatoid arthritis. The siNAs are also useful for drug
CC screening, diagnosis, therapeutic target identification and validation,
CC genetic engineering, pharmacogenomics, studying gene function, and gene
CC mapping (e.g., of single nucleotide polymorphisms). The present sequence
CC represents the upper strand of a human TERC-targeted double-stranded
CC siNA, which is identical to the c-fos transcript target sequence.
```

CC transplants for the treatment of a variety of conditions. They may be  
 CC used for treating cancer, restenosis, infectious diseases (specifically  
 CC protozoal), transplant rejection, or autoimmune or age-related diseases,  
 CC e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,  
 CC skin ulcers and rheumatoid arthritis. The siRNAs are also useful for drug  
 CC screening, diagnosis, therapeutic target identification and validation,  
 CC genetic engineering, pharmacogenomics, studying gene function, and gene  
 CC mapping (e.g., of single nucleotide polymorphisms). The present sequence  
 CC represents the upper strand of a human TERC-targeted double-stranded  
 CC siRNA, which is identical to the c-fos transcript target sequence.

XX  
 SQ Sequence 19 BP; 0 A; 7 C; 9 G; 0 T; 3 U; 0 Other;

Query Match 4.2%; Score 19; DB 1; Length 19;  
 Best Local Similarity 84.2%; Pred. No. 1.5e+02;  
 Matches 16; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

QY 320 CCGCGGGTCTCCGGGGC 338

Db 1 CCGCGGGUCUCUGGGGGC 19

RESULT 178

ID ADF93312 standard; RNA; 19 BP.

XX ADF93312;

AC ADF93312;

DT 26-FEB-2004 (first entry)

DE Human TERC transcript target sequence/siRNA upper strand, SEQ ID 29.

XX Cytostatic; vasotropic; protozoacide; immunosuppressive; dermatological;  
 KW neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;  
 KW antiarthritic; antiinflammatory; gene therapy; telomerase; human; terc;  
 KW RNA interference; short interfering nucleic acid; siRNA;  
 KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;  
 KW short hairpin RNA; shRNA; expression modulation; gene therapy;  
 KW drug screening; diagnosis; therapeutic target identification;  
 KW pharmacogenomics; gene function analysis; gene mapping; TERC; TERT; ss.

XX Homo sapiens.

XX WO2003070742-A1.

XX 28-AUG-2003.

XX 11-FEB-2003; 2003WO-US004088.

XX 20-FEB-2002; 2002US-0358580P.

XX 11-MAR-2002; 2002US-0363124P.

XX 06-JUN-2002; 2002US-0386782P.

XX 17-JUL-2002; 2002US-0396600P.

XX 29-AUG-2002; 2002US-0406784P.

XX 05-SEP-2002; 2002US-0408378P.

XX 09-SEP-2002; 2002US-0409293P.

XX 15-JAN-2003; 2003US-0440129P.

XX (RIBO-) RIBOZYME PHARM INC.

XX Mcswiggen J, Beigelman L;

XX WPI; 2003-689777/65.

XX New short interfering nucleic acid downregulates expression of the

XX telomerase gene useful e.g. for treatment and diagnosis of cancer.

XX Example 3; SEQ ID NO 29; 145pp; English.

XX The invention relates to short interfering nucleic acids (siRNA) which

XX downregulate expression of the one or more telomerase genes by RNA

XX interference. The siRNAs may or may not comprise ribonucleotides and may

XX be double or single stranded. They further comprise sense and antisense

CC regions, or alternatively are assembled from a sense oligonucleotide and  
 CC an antisense oligonucleotide. Specifically, the siRNAs include short  
 CC interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short  
 CC hairpin RNA (shRNA). The siRNAs can be unmodified or chemically modified,  
 CC can contain deoxyribonucleotides, and can be chemically synthesised,  
 CC expressed from a vector or enzymatically synthesised. The invention also  
 CC relates to kits for the in vitro or in vivo delivery of siRNA; conjugates  
 CC and/or complexes of siRNA; and vectors that express siRNA. The siRNAs are  
 CC used to modulate expression of the telomerase genes in cells, tissue  
 CC explants or organisms (e.g., by ex vivo gene therapy), or in grafts and  
 CC transplants for the treatment of a variety of conditions. They may be  
 CC used for treating cancer, restenosis, infectious diseases (specifically  
 CC protozoal), transplant rejection, or autoimmune or age-related diseases,  
 CC e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,  
 CC skin ulcers and rheumatoid arthritis. The siRNAs are also useful for drug  
 CC screening, diagnosis, therapeutic target identification and validation,  
 CC genetic engineering, pharmacogenomics, studying gene function, and gene  
 CC mapping (e.g., of single nucleotide polymorphisms). The present sequence  
 CC represents the upper strand of a human TERC-targeted double-stranded  
 CC siRNA, which is identical to the c-fos transcript target sequence.

SQ Sequence 19 BP; 3 A; 4 C; 8 G; 0 T; 4 U; 0 Other;

Query Match 4.2%; Score 19; DB 1; Length 19;

Best Local Similarity 78.9%; Pred. No. 1.5e+02;

Matches 15; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

QY 410 CTGAGCTGTGGGACGTGCA 428

Db 1 CUGAGCUGGGACGUGCA 19

RESULT 179

ID ADF93560/c  
 ID ADF93560 standard; RNA; 19 BP.

XX ADF93560;

AC ADF93560;

DT 26-FEB-2004 (first entry)

DE Human TERC siRNA lower strand, SEQ ID 287.

XX Cytostatic; vasotropic; protozoacide; immunosuppressive; dermatological;  
 KW neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;  
 KW antiarthritic; antiinflammatory; gene therapy; telomerase; human; terc;  
 KW RNA interference; short interfering nucleic acid; siRNA;  
 KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;  
 KW short hairpin RNA; shRNA; expression modulation; gene therapy;  
 KW drug screening; diagnosis; therapeutic target identification;  
 KW pharmacogenomics; gene function analysis; gene mapping; TERC; TERT; ss.

XX Homo sapiens.

XX WO2003070742-A1.

XX 28-AUG-2003.

XX 11-FEB-2003; 2003WO-US004088.

XX 20-FEB-2002; 2002US-0358580P.

XX 11-MAR-2002; 2002US-0363124P.

XX 06-JUN-2002; 2002US-0386782P.

XX 17-JUL-2002; 2002US-0396600P.

XX 29-AUG-2002; 2002US-0406784P.

XX 05-SEP-2002; 2002US-0408378P.

XX 09-SEP-2002; 2002US-0409293P.

XX 15-JAN-2003; 2003US-0440129P.

XX (RIBO-) RIBOZYME PHARM INC.

XX Mcswiggen J, Beigelman L;

XX WPI; 2003-689777/65.



XX New short interfering nucleic acid downregulates expression of the  
PT telomerase gene useful e.g. for treatment and diagnosis of cancer.  
PS Example 3; SEQ ID NO 287; 145pp; English.  
XX  
XX The invention relates to short interfering nucleic acids (siNA) which  
CC downregulate expression of the one or more telomerase genes by RNA  
CC interference. The siNAs may or may not comprise ribonucleotides and may  
CC be double or single stranded. They further comprise sense and antisense  
CC regions, or alternatively are assembled from a sense oligonucleotide and  
CC an antisense oligonucleotide. Specifically, the siNAs include short  
CC interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short  
CC hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,  
CC can contain deoxyribonucleotides, and can be chemically synthesised,  
CC expressed from a vector or enzymatically synthesised. The invention also  
CC relates to kits for the in vitro or in vivo delivery of siNA; conjugates  
CC and/or complexes of siNA; and vectors that express siNA. The siNAs are  
CC used to modulate expression of the telomerase genes in cells, tissue  
CC explants or organisms (e.g., by ex vivo gene therapy), or in grafts and  
CC transplants for the treatment of a variety of conditions. They may be  
CC used for treating cancer, restenosis, infectious diseases (specifically  
CC protozoal), transplant rejection, or autoimmune or age-related diseases,  
CC e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,  
CC skin ulcers and rheumatoid arthritis. The siNAs are also useful for drug  
CC screening, diagnosis, therapeutic target identification and validation,  
CC genetic engineering, pharmacogenomics, studying gene function, and gene  
CC mapping (e.g., of single nucleotide polymorphisms). The present sequence  
CC represents the lower strand of a human TERC-targeted double-stranded  
CC siNA.  
XX  
XX Sequence 19 BP; 5 A; 7 C; 4 G; 0 T; 3 U; 0 Other;  
SQ  
Query Match 4.2%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 1.5e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Qy 302 AGAGTTGGGCTCTGTACG 320  
Db 19 AGAGTTGGGCTCTGTACG 1  
RESULT 180  
ADF93564/c  
ID ADF93564 standard; RNA; 19 BP.  
AC ADF93564;  
XX 26-FEB-2004 (first entry)  
DT Human TERC siNA lower strand, SEQ ID 291.  
DE  
XX Cytostatic; vasotropic; protozoacide; immunosuppressive; dermatological;  
KW neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;  
KW antiarthritic; antiinflammatory; gene therapy; telomerase; human; terc;  
KW RNA interference; short interfering nucleic acid; siNA;  
KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;  
KW short hairpin RNA; shRNA; expression modulation; gene therapy;  
KW drug screening; diagnosis; therapeutic target identification;  
KW pharmacogenomics; gene function analysis; gene mapping; TERC; TERT; ss.  
XX  
XX Homo sapiens.  
XX WO2003070742-A1.  
XX 28-AUG-2003.  
PD  
XX 11-FEB-2003; 2003WO-US004088.  
PF  
XX 20-FEB-2002; 2002US-0358580P.  
PR  
XX 11-MAR-2002; 2002US-0363124P.  
PR  
XX 06-JUN-2002; 2002US-0386782P.  
PR  
XX 17-JUL-2002; 2002US-0396600P.

PR 29-AUG-2002; 2002US-0406784P.  
PR 05-SEP-2002; 2002US-0408378P.  
PR 09-SEP-2002; 2002US-0409293P.  
PR 15-JAN-2003; 2003US-0440129P.  
XX  
XX (RIBO-) RIBOZYME PHARM INC.  
XX  
XX Mcswiggen J, Beigelman L;  
PI  
XX WPI; 2003-689777/65.  
DR  
XX  
XX New short interfering nucleic acid downregulates expression of the  
PT telomerase gene useful e.g. for treatment and diagnosis of cancer.  
XX  
XX Example 3; SEQ ID NO 291; 145pp; English.  
XX  
XX The invention relates to short interfering nucleic acids (siNA) which  
CC downregulate expression of the one or more telomerase genes by RNA  
CC interference. The siNAs may or may not comprise ribonucleotides and may  
CC be double or single stranded. They further comprise sense and antisense  
CC regions, or alternatively are assembled from a sense oligonucleotide and  
CC an antisense oligonucleotide. Specifically, the siNAs include short  
CC interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short  
CC hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,  
CC can contain deoxyribonucleotides, and can be chemically synthesised,  
CC expressed from a vector or enzymatically synthesised. The invention also  
CC relates to kits for the in vitro or in vivo delivery of siNA; conjugates  
CC and/or complexes of siNA; and vectors that express siNA. The siNAs are  
CC used to modulate expression of the telomerase genes in cells, tissue  
CC explants or organisms (e.g., by ex vivo gene therapy), or in grafts and  
CC transplants for the treatment of a variety of conditions. They may be  
CC used for treating cancer, restenosis, infectious diseases (specifically  
CC protozoal), transplant rejection, or autoimmune or age-related diseases,  
CC e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,  
CC skin ulcers and rheumatoid arthritis. The siNAs are also useful for drug  
CC screening, diagnosis, therapeutic target identification and validation,  
CC genetic engineering, pharmacogenomics, studying gene function, and gene  
CC mapping (e.g., of single nucleotide polymorphisms). The present sequence  
CC represents the lower strand of a human TERC-targeted double-stranded  
CC siNA.  
XX  
XX Sequence 19 BP; 1 A; 7 C; 6 G; 0 T; 5 U; 0 Other;  
SQ  
Query Match 4.2%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 1.5e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Qy 374 AGGAACGGAGCGAGTCCCC 392  
Db 19 AGGAACGGAGCGAGTCCCC 1  
RESULT 181  
ADF93294  
ID ADF93294 standard; RNA; 19 BP.  
XX  
XX ADF93294;  
XX  
XX 26-FEB-2004 (first entry)  
DT  
XX Human TERC transcript target sequence/siNA upper strand, SEQ ID 11.  
DE  
XX  
XX Cytostatic; vasotropic; protozoacide; immunosuppressive; dermatological;  
KW neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;  
KW antiarthritic; antiinflammatory; gene therapy; telomerase; human; terc;  
KW RNA interference; short interfering nucleic acid; siNA;  
KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;  
KW short hairpin RNA; shRNA; expression modulation; gene therapy;  
KW drug screening; diagnosis; therapeutic target identification;  
KW pharmacogenomics; gene function analysis; gene mapping; TERC; TERT; ss.  
XX  
XX Homo sapiens.  
XX

PN WO2003070742-A1.  
XX 28-AUG-2003.  
XX 11-FEB-2003; 2003WO-US004088.  
XX 20-FEB-2002; 2002US-0358580P.  
PR 11-MAR-2002; 2002US-0363124P.  
PR 06-JUN-2002; 2002US-0386782P.  
PR 17-JUL-2002; 2002US-0396600P.  
PR 29-AUG-2002; 2002US-0406784P.  
PR 05-SEP-2002; 2002US-0408378P.  
PR 09-SEP-2002; 2002US-0409293P.  
PR 15-JAN-2003; 2003US-0440129P.  
XX (RIBO-) RIBOZYME PHARM INC.  
XX Mcswiggen J, Beigelman L;  
XX WPI; 2003-689777/65.  
XX New short interfering nucleic acid downregulates expression of the  
PT telomerase gene useful e.g. for treatment and diagnosis of cancer.  
XX Example 3; SEQ ID NO 11; 145pp; English.  
XX The invention relates to short interfering nucleic acids (siNA) which  
CC downregulate expression of the one or more telomerase genes by RNA  
CC interference. The siNAs may or may not comprise ribonucleotides and may  
CC be double or single stranded. They further comprise sense and antisense  
CC regions, or alternatively are assembled from a sense oligonucleotide and  
CC an antisense oligonucleotide. Specifically, the siNAs include short  
CC interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short  
CC hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,  
CC can contain deoxyribonucleotides, and can be chemically synthesised,  
CC expressed from a vector or enzymatically synthesised. The invention also  
CC relates to kits for the in vitro or in vivo delivery of siNA; conjugates  
CC and/or complexes of siNA; and vectors that express siNA. The siNAs are  
CC used to modulate expression of the telomerase genes in cells, tissue  
CC explants or organisms (e.g., by ex vivo gene therapy), or in grafts and  
CC transplants for the treatment of a variety of conditions. They may be  
CC used for treating cancer, restenosis, infectious diseases (specifically  
CC protozoal), transplant rejection, or autoimmune or age-related diseases,  
CC e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,  
CC skin ulcers and rheumatoid arthritis. The siNAs are also useful for drug  
CC screening, diagnosis, therapeutic target identification and validation,  
CC genetic engineering, pharmacogenomics, studying gene function, and gene  
CC mapping (e.g., of single nucleotide polymorphisms). The present sequence  
CC represents the upper strand of a human TERC-targeted double-stranded  
CC siNA, which is identical to the c-fos transcript target sequence.  
SQ Sequence 19 BP; 0 A; 8 C; 4 G; 0 T; 7 U; 0 Other;  
Query Match 4.2%; Score 19; DB 1; Length 19;  
Best Local Similarity 63.2%; Pred. No. 1.5e+02;  
Matches 12; Conservative 7; Mismatches 0; Indels 0; Gaps 0;  
QY 86 TCCCGCGCGCTGTTTC 104  
DB 1 UCCCGCGCGCGUUUUC 19  
RESULT 182  
ADP93299  
ID ADP93299 standard; RNA; 19 BP.  
XX ADP93299;  
XX 26-FEB-2004 (first entry)  
DT Human TERC transcript target sequence/siNA upper strand, SEQ ID 16.  
XX Cytostatic; vasotropic; protozoacide; immunosuppressive; dermatological;

KW neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;  
KW antiarthritic; antiinflammatory; gene therapy; telomerase; human; tERC;  
KW RNA interference; short interfering nucleic acid; siNA;  
KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;  
KW short hairpin RNA; shRNA; expression modulation; gene therapy;  
KW drug screening; diagnosis; therapeutic target identification;  
KW pharmacogenomics; gene function analysis; gene mapping; TERC; TERC; ss.  
XX Homo sapiens.  
XX WO2003070742-A1.  
XX 28-AUG-2003.  
XX 11-FEB-2003; 2003WO-US004088.  
XX 20-FEB-2002; 2002US-0358580P.  
PR 11-MAR-2002; 2002US-0363124P.  
PR 06-JUN-2002; 2002US-0386782P.  
PR 17-JUL-2002; 2002US-0396600P.  
PR 29-AUG-2002; 2002US-0406784P.  
PR 05-SEP-2002; 2002US-0408378P.  
PR 09-SEP-2002; 2002US-0409293P.  
PR 15-JAN-2003; 2003US-0440129P.  
XX (RIBO-) RIBOZYME PHARM INC.  
XX Mcswiggen J, Beigelman L;  
XX WPI; 2003-689777/65.  
XX New short interfering nucleic acid downregulates expression of the  
PT telomerase gene useful e.g. for treatment and diagnosis of cancer.  
XX Example 3; SEQ ID NO 16; 145pp; English.  
XX The invention relates to short interfering nucleic acids (siNA) which  
CC downregulate expression of the one or more telomerase genes by RNA  
CC interference. The siNAs may or may not comprise ribonucleotides and may  
CC be double or single stranded. They further comprise sense and antisense  
CC regions, or alternatively are assembled from a sense oligonucleotide and  
CC an antisense oligonucleotide. Specifically, the siNAs include short  
CC interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short  
CC hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,  
CC can contain deoxyribonucleotides, and can be chemically synthesised,  
CC expressed from a vector or enzymatically synthesised. The invention also  
CC relates to kits for the in vitro or in vivo delivery of siNA; conjugates  
CC and/or complexes of siNA; and vectors that express siNA. The siNAs are  
CC used to modulate expression of the telomerase genes in cells, tissue  
CC explants or organisms (e.g., by ex vivo gene therapy), or in grafts and  
CC transplants for the treatment of a variety of conditions. They may be  
CC used for treating cancer, restenosis, infectious diseases (specifically  
CC protozoal), transplant rejection, or autoimmune or age-related diseases,  
CC e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,  
CC skin ulcers and rheumatoid arthritis. The siNAs are also useful for drug  
CC screening, diagnosis, therapeutic target identification and validation,  
CC genetic engineering, pharmacogenomics, studying gene function, and gene  
CC mapping (e.g., of single nucleotide polymorphisms). The present sequence  
CC represents the upper strand of a human TERC-targeted double-stranded  
CC siNA, which is identical to the c-fos transcript target sequence.  
SQ Sequence 19 BP; 2 A; 6 C; 6 G; 0 T; 5 U; 0 Other;  
Query Match 4.2%; Score 19; DB 1; Length 19;  
Best Local Similarity 73.7%; Pred. No. 1.5e+02;  
Matches 14; Conservative 5; Mismatches 0; Indels 0; Gaps 0;  
QY 176 ATGTCAGCTGCGCCCGT 194  
DB 1 AUGUCAGCGUCGCGCCGU 19  
RESULT 183

ADFP93300  
ID ADF93300 standard; RNA; 19 BP.  
XX ADF93300;  
XX 26-FEB-2004 (first entry)  
XX Human TERC transcript target sequence/siNA upper strand, SEQ ID 17.  
XX Cytostatic; vasotropic; protozoicide; immunosuppressive; dermatological;  
XX neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;  
XX antiarthritic; antiinflammatory; gene therapy; telomerase; human; terc;  
XX RNA interference; short interfering nucleic acid; siNA;  
XX short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;  
XX short hairpin RNA; shRNA; expression modulation; gene therapy;  
XX drug screening; diagnosis; therapeutic target identification;  
XX pharmacogenomics; gene function analysis; gene mapping; TERC; TERT; ss.  
XX  
XX Homo sapiens.  
XX WO2003070742-A1.  
XX 28-AUG-2003.  
XX 11-FEB-2003; 2003WO-US004088.  
XX 20-FEB-2002; 2002US-0358580P.  
XX 11-MAR-2002; 2002US-0363124P.  
XX 06-JUN-2002; 2002US-0386782P.  
XX 17-JUL-2002; 2002US-0396600P.  
XX 29-AUG-2002; 2002US-0406784P.  
XX 05-SEP-2002; 2002US-0408378P.  
XX 09-SEP-2002; 2002US-0409293P.  
XX 15-JAN-2003; 2003US-0440129P.  
XX (RIBO-) RIBOZYME PHARM INC.  
XX Mcswiggen J, Beigelman L;  
XX WPI; 2003-689777/65.  
XX New short interfering nucleic acid downregulates expression of the  
XX telomerase gene useful e.g. for treatment and diagnosis of cancer.  
XX  
XX Example 3; SEQ ID NO 17; 145pp; English.  
XX The invention relates to short interfering nucleic acids (siNA) which  
XX downregulate expression of the one or more telomerase genes by RNA  
XX interference. The siNAs may or may not comprise ribonucleotides and may  
XX be double or single stranded. They further comprise sense and antisense  
XX regions, or alternatively are assembled from a sense oligonucleotide and  
XX an antisense oligonucleotide. Specifically, the siNAs include short  
XX interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short  
XX hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,  
XX can contain deoxyribonucleotides, and can be chemically synthesised,  
XX expressed from a vector or enzymatically synthesised. The invention also  
XX relates to kits for the in vitro or in vivo delivery of siNA; conjugates  
XX and/or complexes of siNA; and vectors that express siNA. The siNAs are  
XX used to modulate expression of the telomerase genes in cells, tissue  
XX explants or organisms (e.g., by ex vivo gene therapy), or in grafts and  
XX transplants for the treatment of a variety of conditions. They may be  
XX used for treating cancer, restenosis, infectious diseases (specifically  
XX protozoal), transplant rejection, or autoimmune or age-related diseases,  
XX e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,  
XX skin ulcers and rheumatoid arthritis. The siNAs are also useful for drug  
XX screening, diagnosis, therapeutic target identification and validation,  
XX genetic engineering, pharmacogenomics, studying gene function, and gene  
XX mapping (e.g., of single nucleotide polymorphisms). The present sequence  
XX represents the upper strand of a human TERC-targeted double-stranded  
XX siNA, which is identical to the c-fos transcript target sequence.  
XX  
XX Sequence 19 BP; 1 A; 10 C; 5 G; 0 T; 3 U; 0 Other;

Query Match 4.2%; Score 19; DB 1; Length 19;  
Best Local Similarity 84.2%; Pred. NO. 1.5e+02;  
Matches 16; Conservative 3; Mismatches 0; Indels 0; Gaps 0;  
Oy 194 TTGCCCCCTCCGGGGACC 212  
:|||||:|||||  
Db 1 UUCGCCCCUCCGGGGACC 19  
RESULT 184  
ADFP93306  
ID ADF93306 standard; RNA; 19 BP.  
XX ADF93306;  
XX ADF93306;  
XX 26-FEB-2004 (first entry)  
XX Human TERC transcript target sequence/siNA upper strand, SEQ ID 23.  
XX Cytostatic; vasotropic; protozoicide; immunosuppressive; dermatological;  
XX neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;  
XX antiarthritic; antiinflammatory; gene therapy; telomerase; human; terc;  
XX RNA interference; short interfering nucleic acid; siNA;  
XX short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;  
XX short hairpin RNA; shRNA; expression modulation; gene therapy;  
XX drug screening; diagnosis; therapeutic target identification;  
XX pharmacogenomics; gene function analysis; gene mapping; TERC; TERT; ss.  
XX  
XX Homo sapiens.  
XX WO2003070742-A1.  
XX 28-AUG-2003.  
XX 11-FEB-2003; 2003WO-US004088.  
XX 20-FEB-2002; 2002US-0358580P.  
XX 11-MAR-2002; 2002US-0363124P.  
XX 06-JUN-2002; 2002US-0386782P.  
XX 17-JUL-2002; 2002US-0396600P.  
XX 29-AUG-2002; 2002US-0406784P.  
XX 05-SEP-2002; 2002US-0408378P.  
XX 09-SEP-2002; 2002US-0409293P.  
XX 15-JAN-2003; 2003US-0440129P.  
XX (RIBO-) RIBOZYME PHARM INC.  
XX Mcswiggen J, Beigelman L;  
XX WPI; 2003-689777/65.  
XX New short interfering nucleic acid downregulates expression of the  
XX telomerase gene useful e.g. for treatment and diagnosis of cancer.  
XX  
XX Example 3; SEQ ID NO 23; 145pp; English.  
XX The invention relates to short interfering nucleic acids (siNA) which  
XX downregulate expression of the one or more telomerase genes by RNA  
XX interference. The siNAs may or may not comprise ribonucleotides and may  
XX be double or single stranded. They further comprise sense and antisense  
XX regions, or alternatively are assembled from a sense oligonucleotide and  
XX an antisense oligonucleotide. Specifically, the siNAs include short  
XX interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short  
XX hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,  
XX can contain deoxyribonucleotides, and can be chemically synthesised,  
XX expressed from a vector or enzymatically synthesised. The invention also  
XX relates to kits for the in vitro or in vivo delivery of siNA; conjugates  
XX and/or complexes of siNA; and vectors that express siNA. The siNAs are  
XX used to modulate expression of the telomerase genes in cells, tissue  
XX explants or organisms (e.g., by ex vivo gene therapy), or in grafts and  
XX transplants for the treatment of a variety of conditions. They may be  
XX used for treating cancer, restenosis, infectious diseases (specifically  
XX protozoal), transplant rejection, or autoimmune or age-related diseases,  
XX e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,  
XX skin ulcers and rheumatoid arthritis. The siNAs are also useful for drug  
XX screening, diagnosis, therapeutic target identification and validation,  
XX genetic engineering, pharmacogenomics, studying gene function, and gene  
XX mapping (e.g., of single nucleotide polymorphisms). The present sequence  
XX represents the upper strand of a human TERC-targeted double-stranded  
XX siNA, which is identical to the c-fos transcript target sequence.  
XX  
XX Sequence 19 BP; 1 A; 10 C; 5 G; 0 T; 3 U; 0 Other;

CC e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,  
 CC skin ulcers and rheumatoid arthritis. The siNAs are also useful for drug  
 CC screening, diagnosis, therapeutic target identification and validation,  
 CC genetic engineering, pharmacogenomics, studying gene function, and gene  
 CC mapping (e.g., of single nucleotide polymorphisms). The present sequence  
 CC represents the upper strand of a human TERC-targeted double-stranded  
 CC siNA, which is identical to the c-fos transcript target sequence.  
 XX  
 SQ Sequence 19 BP; 3 A; 4 C; 7 G; 0 T; 5 U; 0 Other;  
 Query Match 4.2%; Score 19; DB 1; Length 19;  
 Best Local Similarity 73.7%; Pred. No. 1.5e+02;  
 Matches 14; Conservative 5; Mismatches 0; Indels 0; Gaps 0;  
 QY 302 AGAGTTGGGCTCTGTCTCAGC 320  
 Db 1 AGAGUUGGGUCUCACAC 19  
 RESULT 185  
 ADF93314  
 ID ADF93314 standard; RNA; 19 BP.  
 XX  
 AC ADF93314;  
 XX  
 DT 26-FEB-2004 (first entry)  
 XX  
 DE Human TERC transcript target sequence/siNA upper strand, SEQ ID 31.  
 XX  
 KW Cytostatic; vasotropic; protozoacide; immunosuppressive; dermatological;  
 KW neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;  
 KW antiarthritic; antiinflammatory; gene therapy; telomerase; human; terc;  
 KW RNA interference; short interfering nucleic acid; siNA;  
 KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;  
 KW short hairpin RNA; shRNA; expression modulation; gene therapy;  
 KW drug screening; diagnosis; therapeutic target identification;  
 KW pharmacogenomics; gene function analysis; gene mapping; TERC; TERT; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX  
 PN WO2003070742-A1.  
 XX  
 PD 28-AUG-2003.  
 XX  
 XX 11-FEB-2003; 2003WO-US004088.  
 XX  
 PR 20-FEB-2002; 2002US-0358580P.  
 PR 11-MAR-2002; 2002US-0363124P.  
 PR 06-JUN-2002; 2002US-0386782P.  
 PR 17-JUL-2002; 2002US-0396600P.  
 PR 29-AUG-2002; 2002US-0406784P.  
 PR 05-SEP-2002; 2002US-0408378P.  
 PR 09-SEP-2002; 2002US-0409293P.  
 PR 15-JAN-2003; 2003US-0440129P.  
 XX  
 PA (RIBO-) RIBOZYME PHARM INC.  
 XX  
 PI Mcswiggen J, Beigelman L;  
 XX  
 XX WPI; 2003-689777/65.  
 XX  
 DR New short interfering nucleic acid downregulates expression of the  
 PT telomerase gene useful e.g. for treatment and diagnosis of cancer.  
 PS  
 PS Example 3; SEQ ID NO 31; 145pp; English.  
 XX  
 CC The invention relates to short interfering nucleic acids (siNA) which  
 CC downregulate expression of the one or more telomerase genes by RNA  
 CC interference. The siNAs may or may not comprise ribonucleotides and may  
 CC be double or single stranded. They further comprise sense and antisense  
 CC regions, or alternatively are assembled from a sense oligonucleotide and  
 CC an antisense oligonucleotide. Specifically, the siNAs include short  
 CC interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short

CC hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,  
 CC can contain deoxyribonucleotides, and can be chemically synthesised,  
 CC expressed from a vector or enzymatically synthesised. The invention also  
 CC relates to kits for the in vitro or in vivo delivery of siNA; conjugates  
 CC and/or complexes of siNA; and vectors that express siNA. The siNAs are  
 CC used to modulate expression of the telomerase genes in cells, tissue  
 CC explants or organisms (e.g., by ex vivo gene therapy), or in grats and  
 CC transplantants for the treatment of a variety of conditions. They may be  
 CC used for treating cancer, restenosis, infectious diseases (specifically  
 CC protozoal), transplant rejection, or autoimmune or age-related diseases,  
 CC e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,  
 CC skin ulcers and rheumatoid arthritis. The siNAs are also useful for drug  
 CC screening, diagnosis, therapeutic target identification and validation,  
 CC genetic engineering, pharmacogenomics, studying gene function, and gene  
 CC mapping (e.g., of single nucleotide polymorphisms). The present sequence  
 CC represents the upper strand of a human TERC-targeted double-stranded  
 CC siNA, which is identical to the c-fos transcript target sequence.  
 XX  
 SQ Sequence 19 BP; 5 A; 7 C; 4 G; 0 T; 3 U; 0 Other;  
 Query Match 4.2%; Score 19; DB 1; Length 19;  
 Best Local Similarity 84.2%; Pred. No. 1.5e+02;  
 Matches 16; Conservative 3; Mismatches 0; Indels 0; Gaps 0;  
 QY 431 CAGGACTCGGCTCACACAT 449  
 Db 1 CAGGACUCGGCUCACAU 19  
 RESULT 186  
 ADF93563/C  
 ID ADF93563 standard; RNA; 19 BP.  
 XX  
 AC ADF93563;  
 XX  
 DT 26-FEB-2004 (first entry)  
 XX  
 DE Human TERC siNA lower strand, SEQ ID 290.  
 XX  
 KW Cytostatic; vasotropic; protozoacide; immunosuppressive; dermatological;  
 KW neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;  
 KW antiarthritic; antiinflammatory; gene therapy; telomerase; human; terc;  
 KW RNA interference; short interfering nucleic acid; siNA;  
 KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;  
 KW short hairpin RNA; shRNA; expression modulation; gene therapy;  
 KW drug screening; diagnosis; therapeutic target identification;  
 KW pharmacogenomics; gene function analysis; gene mapping; TERC; TERT; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX  
 PN WO2003070742-A1.  
 XX  
 PD 28-AUG-2003.  
 XX  
 XX 11-FEB-2003; 2003WO-US004088.  
 XX  
 PR 20-FEB-2002; 2002US-0358580P.  
 PR 11-MAR-2002; 2002US-0363124P.  
 PR 06-JUN-2002; 2002US-0386782P.  
 PR 17-JUL-2002; 2002US-0396600P.  
 PR 29-AUG-2002; 2002US-0406784P.  
 PR 05-SEP-2002; 2002US-0408378P.  
 PR 09-SEP-2002; 2002US-0409293P.  
 PR 15-JAN-2003; 2003US-0440129P.  
 XX  
 PA (RIBO-) RIBOZYME PHARM INC.  
 XX  
 PI Mcswiggen J, Beigelman L;  
 XX  
 XX WPI; 2003-689777/65.  
 XX  
 DR New short interfering nucleic acid downregulates expression of the  
 PT telomerase gene useful e.g. for treatment and diagnosis of cancer.  
 PS  
 PS Example 3; SEQ ID NO 31; 145pp; English.  
 XX  
 CC The invention relates to short interfering nucleic acids (siNA) which  
 CC downregulate expression of the one or more telomerase genes by RNA  
 CC interference. The siNAs may or may not comprise ribonucleotides and may  
 CC be double or single stranded. They further comprise sense and antisense  
 CC regions, or alternatively are assembled from a sense oligonucleotide and  
 CC an antisense oligonucleotide. Specifically, the siNAs include short  
 CC interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short

XX Example 3; SEQ ID NO 290; 145pp; English.

XX The invention relates to short interfering nucleic acids (siNA) which

XX downregulate expression of the one or more telomerase genes by RNA

XX interference. The siNAs may or may not comprise ribonucleotides and may

XX be double or single stranded. They further comprise sense and antisense

XX regions, or alternatively are assembled from a sense oligonucleotide and

XX an antisense oligonucleotide. Specifically, the siNAs include short

XX interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short

XX hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,

XX can contain deoxyribonucleotides, and can be chemically synthesised,

XX expressed from a vector or enzymatically synthesised. The invention also

XX relates to kits for the in vitro or in vivo delivery of siNA; conjugates

XX and/or complexes of siNA; and vectors that express siNA. The siNAs are

XX used to modulate expression of the telomerase genes in cells, tissue

XX explants or organisms (e.g., by ex vivo gene therapy), or in grafts and

XX transplants for the treatment of a variety of conditions. They may be

XX used for treating cancer, restenosis, infectious diseases (specifically

XX protozoal), transplant rejection, or autoimmune or age-related diseases,

XX e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,

XX skin ulcers and rheumatoid arthritis. The siNAs are also useful for drug

XX screening, diagnosis, therapeutic target identification and validation,

XX genetic engineering, pharmacogenomics, studying gene function, and gene

XX mapping (e.g., of single nucleotide polymorphisms). The present sequence

XX represents the lower strand of a human TERC-targeted double-stranded

XX siNA.

SQ Sequence 19 BP; 3 A; 6 C; 5 G; 0 T; 5 U; 0 Other;

Query Match 4.2%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 1.5e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 356 CTTTCAGGCGCCAGGAAGA 374

Db 19 CTTTCAGGCGCCAGGAAGA 1

RESULT 187

ADP93304

ID ADP93304 standard; RNA; 19 BP.

XX ADP93304;

AC ADP93304;

XX 26-FEB-2004 (first entry)

DT Human TERC transcript target sequence/siNA upper strand, SEQ ID 21.

DE

XX Cytostatic; vasotropic; protozoacide; immunosuppressive; dermatological;

KW neuroprotective; anti-HIV; ophthalmological; antitumor; antirheumatic;

KW antiarthritic; antiinflammatory; gene therapy; telomerase; human; terc;

KW RNA interference; short interfering nucleic acid; siNA;

KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;

KW short hairpin RNA; shRNA; expression modulation; gene therapy;

KW drug screening; diagnosis; therapeutic target identification;

KW pharmacogenomics; gene function analysis; gene mapping; TERC; TERT; ss.

OS Homo sapiens.

XX WO2003070742-A1.

PN 28-AUG-2003.

XX 11-FEB-2003; 2003WO-US004088.

XX 20-FEB-2002; 2002US-0358580P.

PR 11-MAR-2002; 2002US-0363124P.

PR 06-JUN-2002; 2002US-0386782P.

PR 17-JUL-2002; 2002US-0396600P.

PR 29-AUG-2002; 2002US-0406784P.

PR 05-SEP-2002; 2002US-0408378P.

PR 09-SEP-2002; 2002US-0409293P.

PR 15-JAN-2003; 2003US-0440129P.

XX (RIBO-) RIBOZYME PHARM INC.

XX Mcswiggen J, Beigelman L;

XX WPI; 2003-689777/65.

XX New short interfering nucleic acid downregulates expression of the

XX telomerase gene useful e.g. for treatment and diagnosis of cancer.

XX Example 3; SEQ ID NO 21; 145pp; English.

XX The invention relates to short interfering nucleic acids (siNA) which

XX downregulate expression of the one or more telomerase genes by RNA

XX interference. The siNAs may or may not comprise ribonucleotides and may

XX be double or single stranded. They further comprise sense and antisense

XX regions, or alternatively are assembled from a sense oligonucleotide and

XX an antisense oligonucleotide. Specifically, the siNAs include short

XX interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short

XX hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,

XX can contain deoxyribonucleotides, and can be chemically synthesised,

XX expressed from a vector or enzymatically synthesised. The invention also

XX relates to kits for the in vitro or in vivo delivery of siNA; conjugates

XX and/or complexes of siNA; and vectors that express siNA. The siNAs are

XX used to modulate expression of the telomerase genes in cells, tissue

XX explants or organisms (e.g., by ex vivo gene therapy), or in grafts and

XX transplants for the treatment of a variety of conditions. They may be

XX used for treating cancer, restenosis, infectious diseases (specifically

XX protozoal), transplant rejection, or autoimmune or age-related diseases,

XX e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,

XX skin ulcers and rheumatoid arthritis. The siNAs are also useful for drug

XX screening, diagnosis, therapeutic target identification and validation,

XX genetic engineering, pharmacogenomics, studying gene function, and gene

XX mapping (e.g., of single nucleotide polymorphisms). The present sequence

XX represents the upper strand of a human TERC-targeted double-stranded

XX siNA, which is identical to the c-fos transcript target sequence.

SQ Sequence 19 BP; 1 A; 7 C; 8 G; 0 T; 3 U; 0 Other;

Query Match 4.2%; Score 19; DB 1; Length 19;

Best Local Similarity 84.2%; Pred. No. 1.5e+02;

Matches 16; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

Qy 266 CCGGGGCTTCCTCCGGAGGC 284

Db 1 CCGGGGCTTCCTCCGGAGGC 19

RESULT 188

ADP93549/c

ID ADP93549 standard; RNA; 19 BP.

XX ADP93549;

AC ADP93549;

XX 26-FEB-2004 (first entry)

DT Human TERC siNA lower strand, SEQ ID 276.

DE

XX Cytostatic; vasotropic; protozoacide; immunosuppressive; dermatological;

KW neuroprotective; anti-HIV; ophthalmological; antitumor; antirheumatic;

KW antiarthritic; antiinflammatory; gene therapy; telomerase; human; terc;

KW RNA interference; short interfering nucleic acid; siNA;

KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;

KW short hairpin RNA; shRNA; expression modulation; gene therapy;

KW drug screening; diagnosis; therapeutic target identification;

KW pharmacogenomics; gene function analysis; gene mapping; TERC; TERT; ss.

OS Homo sapiens.

XX WO2003070742-A1.

PN 28-AUG-2003.

XX 28-AUG-2003.

XX 11-FEB-2003; 2003WO-US004088.  
 PF 20-FEB-2002; 2002US-0358580P.  
 XX 11-MAR-2002; 2002US-0363124P.  
 PR 06-JUN-2002; 2002US-0386782P.  
 PR 17-JUL-2002; 2002US-0396600P.  
 PR 29-AUG-2002; 2002US-0406784P.  
 PR 05-SEP-2002; 2002US-0408378P.  
 PR 09-SEP-2002; 2002US-0409293P.  
 PR 15-JAN-2003; 2003US-0440129P.  
 XX (RIBO-) RIBOZYME PHARM INC.  
 PA Mcswiggen J, Beigelman L;  
 XX WPI; 2003-689777/65.  
 XX New short interfering nucleic acid downregulates expression of the  
 PT telomerase gene useful e.g. for treatment and diagnosis of cancer.  
 XX Example 3; SEQ ID NO 276; 145pp; English.  
 XX The invention relates to short interfering nucleic acids (siNA) which  
 CC downregulate expression of the one or more telomerase genes by RNA  
 CC interference. The siNAs may or may not comprise ribonucleotides and may  
 CC be double or single stranded. They further comprise sense and antisense  
 CC regions, or alternatively are assembled from a sense oligonucleotide and  
 CC an antisense oligonucleotide. Specifically, the siNAs include short  
 CC interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short  
 CC hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,  
 CC can contain deoxyribonucleotides, and can be chemically synthesised,  
 CC expressed from a vector or enzymatically synthesised. The invention also  
 CC relates to kits for the in vitro or in vivo delivery of siNA; conjugates  
 CC and/or complexes of siNA; and vectors that express siNA. The siNAs are  
 CC used to modulate expression of the telomerase genes in cells, tissue  
 CC explants or organisms (e.g., by ex vivo gene therapy), or in grafts and  
 CC transplants for the treatment of a variety of conditions. They may be  
 CC used for treating cancer, restenosis, infectious diseases (specifically  
 CC protozoal), transplant rejection, or autoimmune or age-related diseases,  
 CC e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,  
 CC skin ulcers and rheumatoid arthritis. The siNAs are also useful for drug  
 CC screening, diagnosis, therapeutic target identification and validation,  
 CC genetic engineering, pharmacogenomics, studying gene function, and gene  
 CC mapping (e.g., of single nucleotide polymorphisms). The present sequence  
 CC represents the lower strand of a human TERC-targeted double-stranded  
 CC siNA.  
 XX Sequence 19 BP; 5 A; 6 C; 6 G; 0 T; 2 U; 0 Other;  
 SQ Query Match 4.2%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 1.5e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 104 CTCGCTGACTTTCAGCGG 122  
 DB 19 CTCGCTGACTTTCAGCGG 1  
 RESULT 189  
 ADF93567/C  
 ID ADF93567 standard; RNA; 19 BP.  
 XX ADF93567;  
 AC ADF93567;  
 XX 26-FEB-2004 (first entry)  
 DT Human TERC siNA lower strand, SEQ ID 294.  
 DE  
 XX Cytostatic; vasotropic; protozoacide; immunosuppressive; dermatological;  
 KW neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;  
 KW antiarthritic; antiinflammatory; gene therapy; telomerase; human; terc;  
 KW RNA interference; short interfering nucleic acid; siNA;

KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;  
 KW short hairpin RNA; shRNA; expression modulation; gene therapy;  
 KW drug screening; diagnosis; therapeutic target identification;  
 KW pharmacogenomics; gene function analysis; gene mapping; TERC; TERT; ss.  
 XX Homo sapiens.  
 OS WO2003070742-A1.  
 PN 28-AUG-2003.  
 XX 11-FEB-2003; 2003WO-US004088.  
 PF 20-FEB-2002; 2002US-0358580P.  
 XX 11-MAR-2002; 2002US-0363124P.  
 PR 06-JUN-2002; 2002US-0386782P.  
 PR 17-JUL-2002; 2002US-0396600P.  
 PR 29-AUG-2002; 2002US-0406784P.  
 PR 05-SEP-2002; 2002US-0408378P.  
 PR 09-SEP-2002; 2002US-0409293P.  
 PR 15-JAN-2003; 2003US-0440129P.  
 XX (RIBO-) RIBOZYME PHARM INC.  
 PA Mcswiggen J, Beigelman L;  
 XX WPI; 2003-689777/65.  
 XX New short interfering nucleic acid downregulates expression of the  
 PT telomerase gene useful e.g. for treatment and diagnosis of cancer.  
 XX Example 3; SEQ ID NO 294; 145pp; English.  
 XX The invention relates to short interfering nucleic acids (siNA) which  
 CC downregulate expression of the one or more telomerase genes by RNA  
 CC interference. The siNAs may or may not comprise ribonucleotides and may  
 CC be double or single stranded. They further comprise sense and antisense  
 CC regions, or alternatively are assembled from a sense oligonucleotide and  
 CC an antisense oligonucleotide. Specifically, the siNAs include short  
 CC interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short  
 CC hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,  
 CC can contain deoxyribonucleotides, and can be chemically synthesised,  
 CC expressed from a vector or enzymatically synthesised. The invention also  
 CC relates to kits for the in vitro or in vivo delivery of siNA; conjugates  
 CC and/or complexes of siNA; and vectors that express siNA. The siNAs are  
 CC used to modulate expression of the telomerase genes in cells, tissue  
 CC explants or organisms (e.g., by ex vivo gene therapy), or in grafts and  
 CC transplants for the treatment of a variety of conditions. They may be  
 CC used for treating cancer, restenosis, infectious diseases (specifically  
 CC protozoal), transplant rejection, or autoimmune or age-related diseases,  
 CC e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,  
 CC skin ulcers and rheumatoid arthritis. The siNAs are also useful for drug  
 CC screening, diagnosis, therapeutic target identification and validation,  
 CC genetic engineering, pharmacogenomics, studying gene function, and gene  
 CC mapping (e.g., of single nucleotide polymorphisms). The present sequence  
 CC represents the lower strand of a human TERC-targeted double-stranded  
 CC siNA.  
 XX Sequence 19 BP; 2 A; 4 C; 8 G; 0 T; 5 U; 0 Other;  
 SQ Query Match 4.2%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 1.5e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 428 ACCGAGGACTCGGCTCACA 446  
 DB 19 ACCGAGGACTCGGCTCACA 1  
 RESULT 190  
 ADF93301  
 ID ADF93301 standard; RNA; 19 BP.  
 XX

AC ADF933301;  
XX 26-FEB-2004 (first entry)  
XX Human TERC transcript target sequence/siNA upper strand, SEQ ID 18.  
XX  
XX Cytostatic; vasotropic; protozoacide; immunosuppressive; dermatological;  
KW neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;  
KW antiarthritic; antiinflammatory; gene therapy; telomerase; human; tERC;  
KW RNA interference; short interfering nucleic acid; siNA;  
KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;  
KW short hairpin RNA; shRNA; expression modulation; gene therapy;  
KW drug screening; diagnosis; therapeutic target identification;  
KW pharmacogenomics; gene function analysis; gene mapping; TERC; TERT; ss.  
XX  
XX Homo sapiens.  
XX WO2003070742-A1.  
XX 28-AUG-2003.  
XX 11-FEB-2003; 2003WO-US004088.  
XX 20-FEB-2002; 2002US-0358580P.  
XX 11-MAR-2002; 2002US-0363124P.  
XX 06-JUN-2002; 2002US-0386782P.  
XX 17-JUL-2002; 2002US-0396600P.  
XX 29-AUG-2002; 2002US-0406784P.  
XX 05-SEP-2002; 2002US-0408378P.  
XX 09-SEP-2002; 2002US-0409293P.  
XX 15-JAN-2003; 2003US-0440129P.  
XX (RIBO-) RIBOZYME PHARM INC.  
XX  
XX Mcswiggen J, Beigelman L;  
XX WPI; 2003-689777/65.  
XX New short interfering nucleic acid downregulates expression of the  
XX telomerase gene useful e.g. for treatment and diagnosis of cancer.  
XX  
XX Example 3; SEQ ID NO 18; 145pp; English.  
XX  
XX The invention relates to short interfering nucleic acids (siNA) which  
XX downregulate expression of the one or more telomerase genes by RNA  
XX interference. The siNAs may or may not comprise ribonucleotides and may  
XX be double or single stranded. They further comprise sense and antisense  
XX regions, or alternatively are assembled from a sense oligonucleotide and  
XX an antisense oligonucleotide. Specifically, the siNAs include short  
XX interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short  
XX hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,  
XX can contain deoxyribonucleotides, and can be chemically synthesised,  
XX expressed from a vector or enzymatically synthesised. The invention also  
XX relates to kits for the in vitro or in vivo delivery of siNA; conjugates  
XX used for treating cancer, restenosis, infectious diseases (specifically  
XX protozoal), transplant rejection, or autoimmune or age-related diseases,  
XX e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,  
XX skin ulcers and rheumatoid arthritis. The siNAs are also useful for drug  
XX screening, diagnosis, pharmacogenomics, studying gene function, and gene  
XX mapping (e.g., of single nucleotide polymorphisms). The present sequence  
XX represents the upper strand of a human TERC-targeted double-stranded  
XX siNA, which is identical to the c-fos transcript target sequence.  
XX  
XX Sequence 19 BP; 0 A; 8 C; 8 G; 0 T; 3 U; 0 Other;  
XX  
XX Query Match 4.2%; Score 19; DB 1; Length 19;  
XX Best Local Similarity 84.2%; Pred. No. 1.5e+02;  
XX Matches 16; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

QY 212 CTGCGCGGGTGCCTGCC 230  
|:|||||:|||||  
Db 1 CUGCGCGGGUCGCCUGCC 19  
  
RESULT 191  
ADF93553/C  
ID ADF93553 standard; RNA; 19 BP.  
XX  
XX ADF93553;  
XX  
XX 26-FEB-2004 (first entry)  
XX  
XX Human TERC siNA lower strand, SEQ ID 280.  
XX  
XX Cytostatic; vasotropic; protozoacide; immunosuppressive; dermatological;  
KW neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;  
KW antiarthritic; antiinflammatory; gene therapy; telomerase; human; tERC;  
KW RNA interference; short interfering nucleic acid; siNA;  
KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;  
KW short hairpin RNA; shRNA; expression modulation; gene therapy;  
KW drug screening; diagnosis; therapeutic target identification;  
KW pharmacogenomics; gene function analysis; gene mapping; TERC; TERT; ss.  
XX  
XX Homo sapiens.  
XX WO2003070742-A1.  
XX  
XX 28-AUG-2003.  
XX  
XX 11-FEB-2003; 2003WO-US004088.  
XX  
XX 20-FEB-2002; 2002US-0358580P.  
XX 11-MAR-2002; 2002US-0363124P.  
XX 06-JUN-2002; 2002US-0386782P.  
XX 17-JUL-2002; 2002US-0396600P.  
XX 29-AUG-2002; 2002US-0406784P.  
XX 05-SEP-2002; 2002US-0408378P.  
XX 09-SEP-2002; 2002US-0409293P.  
XX 15-JAN-2003; 2003US-0440129P.  
XX (RIBO-) RIBOZYME PHARM INC.  
XX  
XX Mcswiggen J, Beigelman L;  
XX WPI; 2003-689777/65.  
XX  
XX New short interfering nucleic acid downregulates expression of the  
XX telomerase gene useful e.g. for treatment and diagnosis of cancer.  
XX  
XX Example 3; SEQ ID NO 280; 145pp; English.  
XX  
XX The invention relates to short interfering nucleic acids (siNA) which  
XX downregulate expression of the one or more telomerase genes by RNA  
XX interference. The siNAs may or may not comprise ribonucleotides and may  
XX be double or single stranded. They further comprise sense and antisense  
XX regions, or alternatively are assembled from a sense oligonucleotide and  
XX an antisense oligonucleotide. Specifically, the siNAs include short  
XX interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short  
XX hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,  
XX can contain deoxyribonucleotides, and can be chemically synthesised,  
XX expressed from a vector or enzymatically synthesised. The invention also  
XX relates to kits for the in vitro or in vivo delivery of siNA; conjugates  
XX used to modulate expression of the telomerase genes in cells, tissue  
XX explants or organisms (e.g., by ex vivo gene therapy), or in grafts and  
XX transplants for the treatment of a variety of conditions. They may be  
XX used for treating cancer, restenosis, infectious diseases (specifically  
XX protozoal), transplant rejection, or autoimmune or age-related diseases,  
XX e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,  
XX skin ulcers and rheumatoid arthritis. The siNAs are also useful for drug  
XX screening, diagnosis, pharmacogenomics, studying gene function, and gene  
XX mapping (e.g., of single nucleotide polymorphisms). The present sequence  
XX represents the upper strand of a human TERC-targeted double-stranded  
XX siNA, which is identical to the c-fos transcript target sequence.  
XX  
XX Sequence 19 BP; 0 A; 8 C; 8 G; 0 T; 3 U; 0 Other;

CC genetic engineering, pharmacogenomics, studying gene function, and gene  
CC mapping (e.g., of single nucleotide polymorphisms). The present sequence  
CC represents the lower strand of a human TERC-targeted double-stranded  
CC siNA.  
XX  
SQ Sequence 19 BP; 5 A; 6 C; 6 G; 0 T; 2 U; 0 Other;  
Query Match 4.2%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 1.5e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 176 ATGTCAGCTGCTGCCCCGT 194  
DB 19 ATGTCAGCTGCTGCCCCGT 1  
XX  
RESULT 192  
ADF93568/C  
ID ADF93568 standard; RNA; 19 BP.  
XX  
AC ADF93568;  
XX  
DT 26-FEB-2004 (first entry)  
XX  
DE Human TERC siNA lower strand, SEQ ID 295.  
XX  
KW Cytostatic; vasotropic; protozoacide; immunosuppressive; dermatological;  
KW neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;  
KW antiarthritic; antiinflammatory; gene therapy; telomerase; human; terc;  
KW RNA interference; short interfering nucleic acid; siNA;  
KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;  
KW short hairpin RNA; shRNA; expression modulation; gene therapy;  
KW drug screening; diagnosis; therapeutic target identification;  
KW pharmacogenomics; gene function analysis; gene mapping; TERC; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO2003070742-A1.  
XX  
PD 28-AUG-2003.  
XX  
PF 11-FEB-2003; 2003WO-US004088.  
XX  
PR 20-FEB-2002; 2002US-0358580P.  
XX  
PR 11-MAR-2002; 2002US-0363124P.  
PR 06-JUN-2002; 2002US-0386782P.  
PR 17-JUL-2002; 2002US-0396600P.  
PR 29-AUG-2002; 2002US-0406784P.  
PR 05-SEP-2002; 2002US-0408378P.  
PR 09-SEP-2002; 2002US-0409293P.  
PR 15-JAN-2003; 2003US-0440129P.  
XX  
PA (RIBO-) RIBOZYME PHARM INC.  
XX  
PI Mcswiggen J, Beigelman L;  
XX  
XX WPI; 2003-689777/65.  
XX  
PT New short interfering nucleic acid downregulates expression of the  
telomerase gene useful e.g. for treatment and diagnosis of cancer.  
XX  
XX Example 3; SEQ ID NO 295; 145pp; English.  
XX  
XX The invention relates to short interfering nucleic acids (siNA) which  
downregulate expression of the one or more telomerase genes by RNA  
interference. The siNAs may or may not comprise ribonucleotides and may  
be double or single stranded. They further comprise sense and antisense  
regions, or alternatively are assembled from a sense oligonucleotide and  
an antisense oligonucleotide. Specifically, the siNAs include short  
interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short  
hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,  
can contain deoxyribonucleotides, and can be chemically synthesised,  
expressed from a vector or enzymatically synthesised. The invention also

CC relates to kits for the in vitro or in vivo delivery of siNA; conjugates  
CC and/or complexes of siNA; and vectors that express siNA. The siNAs are  
CC used to modulate expression of the telomerase genes in cells, tissue  
CC explants or organisms (e.g., by ex vivo gene therapy), or in grafts and  
CC transplants for the treatment of a variety of conditions. They may be  
CC used for treating cancer, restenosis, infectious diseases (specifically  
CC protozoal), transplant rejection, or autoimmune or age-related diseases,  
CC e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,  
CC skin ulcers and rheumatoid arthritis. The siNAs are also useful for drug  
CC screening, diagnosis, therapeutic target identification and validation,  
CC genetic engineering, pharmacogenomics, studying gene function, and gene  
CC mapping (e.g., of single nucleotide polymorphisms). The present sequence  
CC represents the lower strand of a human TERC-targeted double-stranded  
CC siNA.  
XX  
SQ Sequence 19 BP; 3 A; 4 C; 7 G; 0 T; 5 U; 0 Other;  
Query Match 4.2%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 1.5e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 431 CAGGACTCGGCTCACACAT 449  
DB 19 CAGGACTCGGCTCACACAT 1  
XX  
RESULT 193  
ADF93305  
ID ADF93305 standard; RNA; 19 BP.  
XX  
AC ADF93305;  
XX  
DT 26-FEB-2004 (first entry)  
XX  
DE Human TERC transcript target sequence/siNA upper strand, SEQ ID 22.  
XX  
KW Cytostatic; vasotropic; protozoacide; immunosuppressive; dermatological;  
KW neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;  
KW antiarthritic; antiinflammatory; gene therapy; telomerase; human; terc;  
KW RNA interference; short interfering nucleic acid; siNA;  
KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;  
KW short hairpin RNA; shRNA; expression modulation; gene therapy;  
KW drug screening; diagnosis; therapeutic target identification;  
KW pharmacogenomics; gene function analysis; gene mapping; TERC; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO2003070742-A1.  
XX  
PD 28-AUG-2003.  
XX  
PF 11-FEB-2003; 2003WO-US004088.  
XX  
PR 20-FEB-2002; 2002US-0358580P.  
PR 11-MAR-2002; 2002US-0363124P.  
PR 06-JUN-2002; 2002US-0386782P.  
PR 17-JUL-2002; 2002US-0396600P.  
PR 29-AUG-2002; 2002US-0406784P.  
PR 05-SEP-2002; 2002US-0408378P.  
PR 09-SEP-2002; 2002US-0409293P.  
PR 15-JAN-2003; 2003US-0440129P.  
XX  
PA (RIBO-) RIBOZYME PHARM INC.  
XX  
PI Mcswiggen J, Beigelman L;  
XX  
XX WPI; 2003-689777/65.  
XX  
PT New short interfering nucleic acid downregulates expression of the  
telomerase gene useful e.g. for treatment and diagnosis of cancer.  
XX  
XX Example 3; SEQ ID NO 22; 145pp; English.  
XX



CC The invention relates to short interfering nucleic acids (siNA) which  
 CC downregulate expression of the one or more telomerase genes by RNA  
 CC interference. The siNAs may or may not comprise ribonucleotides and may  
 CC be double or single stranded. They further comprise sense and antisense  
 CC regions, or alternatively are assembled from a sense oligonucleotide and  
 CC an antisense oligonucleotide. Specifically, the siNAs include short  
 CC interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short  
 CC hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,  
 CC can contain deoxyribonucleotides, and can be chemically synthesised,  
 CC expressed from a vector or enzymatically synthesised. The invention also  
 CC relates to kits for the in vitro or in vivo delivery of siNA. The siNAs are  
 CC and/or complexes of siNA; and vectors that express siNA. The siNAs are  
 CC used to modulate expression of the telomerase genes in cells, tissue  
 CC explants or organisms (e.g., by ex vivo gene therapy), or in grafts and  
 CC transplants for the treatment of a variety of conditions. They may be  
 CC used for treating cancer, restenosis, infectious diseases (specifically  
 CC protozoal), transplant rejection, or autoimmune or age-related diseases,  
 CC e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,  
 CC skin ulcers and rheumatoid arthritis. The siNAs are also useful for drug  
 CC screening, diagnosis, therapeutic target identification and validation,  
 CC genetic engineering, pharmacogenomics, studying gene function, and gene  
 CC mapping (e.g., of single nucleotide polymorphisms). The present sequence  
 CC represents the upper strand of a human TERC-targeted double-stranded  
 CC siNA, which is identical to the c-fos transcript target sequence.

XX Sequence 19 BP; 5 A; 10 C; 3 G; 0 T; 1 U; 0 Other;

Query Match 4.2%; Score 19; DB 1; Length 19;  
 Best Local Similarity 94.7%; Pred. No. 1.5e+02;  
 Matches 18; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 284 CACCACATGCCACCGCGAA 302

Db 1 CACCACATGCCACCGCGAA 19

RESULT 194

ADF93547/c  
 ID ADF93547 standard; RNA; 19 BP.

XX AC ADF93547;

XX DT 26-FEB-2004 (first entry)

XX DE Human TERC siNA lower strand, SEQ ID 274.

XX Cytostatic; vasotropic; protozoacide; immunosuppressive; dermatological;  
 KW neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;  
 KW antiarthritic; antiinflammatory; gene therapy; telomerase; human; terc;  
 KW RNA interference; short interfering nucleic acid; siNA;  
 KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;  
 KW short hairpin RNA; shRNA; expression modulation; gene therapy;  
 KW drug screening; diagnosis; therapeutic target identification;  
 KW pharmacogenomics; gene function analysis; gene mapping; TERC; TERT; ss.

XX OS Homo sapiens.

XX PN WO2003070742-A1.

XX PD 28-AUG-2003.

XX PF 11-FEB-2003; 2003WO-US004088.

XX PR 20-FEB-2002; 2002US-0358580P.

XX PR 11-MAR-2002; 2002US-0363124P.

XX PR 06-JUN-2002; 2002US-0386782P.

XX PR 17-JUL-2002; 2002US-0396600P.

XX PR 29-AUG-2002; 2002US-0406784P.

XX PR 05-SEP-2002; 2002US-0408378P.

XX PR 09-SEP-2002; 2002US-0409293P.

XX PR 15-JAN-2003; 2003US-0440129P.

XX PA (RIBO-) RIBOZYME PHARM INC.

XX McSwiggen J, Beigelman L;

XX WPI; 2003-689777/65.

XX New short interfering nucleic acid downregulates expression of the  
 PT telomerase gene useful e.g. for treatment and diagnosis of cancer.

XX Example 3; SEQ ID NO 274; 145pp; English.

XX The invention relates to short interfering nucleic acids (siNA) which  
 CC downregulate expression of the one or more telomerase genes by RNA  
 CC interference. The siNAs may or may not comprise ribonucleotides and may  
 CC be double or single stranded. They further comprise sense and antisense  
 CC regions, or alternatively are assembled from a sense oligonucleotide and  
 CC an antisense oligonucleotide. Specifically, the siNAs include short  
 CC interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short  
 CC hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,  
 CC can contain deoxyribonucleotides, and can be chemically synthesised,  
 CC expressed from a vector or enzymatically synthesised. The invention also  
 CC relates to kits for the in vitro or in vivo delivery of siNA. The siNAs are  
 CC and/or complexes of siNA; and vectors that express siNA. The siNAs are  
 CC used to modulate expression of the telomerase genes in cells, tissue  
 CC explants or organisms (e.g., by ex vivo gene therapy), or in grafts and  
 CC transplants for the treatment of a variety of conditions. They may be  
 CC used for treating cancer, restenosis, infectious diseases (specifically  
 CC protozoal), transplant rejection, or autoimmune or age-related diseases,  
 CC e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,  
 CC skin ulcers and rheumatoid arthritis. The siNAs are also useful for drug  
 CC screening, diagnosis, therapeutic target identification and validation,  
 CC genetic engineering, pharmacogenomics, studying gene function, and gene  
 CC mapping (e.g., of single nucleotide polymorphisms). The present sequence  
 CC represents the lower strand of a human TERC-targeted double-stranded  
 CC siNA.

XX Sequence 19 BP; 7 A; 6 C; 5 G; 0 T; 1 U; 0 Other;

Query Match 4.2%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 1.5e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 68 TAGGCGCCGCTTTTGCT 86

Db 19 TAGGCGCCGCTTTTGCT 1

RESULT 195

ADF93548/c

ID ADF93548 standard; RNA; 19 BP.

XX AC ADF93548;

XX DT 26-FEB-2004 (first entry)

XX DE Human TERC siNA lower strand, SEQ ID 275.

XX Cytostatic; vasotropic; protozoacide; immunosuppressive; dermatological;  
 KW neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;  
 KW antiarthritic; antiinflammatory; gene therapy; telomerase; human; terc;  
 KW RNA interference; short interfering nucleic acid; siNA;  
 KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;  
 KW short hairpin RNA; shRNA; expression modulation; gene therapy;  
 KW drug screening; diagnosis; therapeutic target identification;  
 KW pharmacogenomics; gene function analysis; gene mapping; TERC; TERT; ss.

XX OS Homo sapiens.

XX PN WO2003070742-A1.

XX PD 28-AUG-2003.

XX PF 11-FEB-2003; 2003WO-US004088.

XX

PR 20-FEB-2002; 2002US-0358580P.  
PR 11-MAR-2002; 2002US-0363124P.  
PR 06-JUN-2002; 2002US-0386782P.  
PR 17-JUL-2002; 2002US-0396600P.  
PR 29-AUG-2002; 2002US-0406784P.  
PR 05-SEP-2002; 2002US-0408378P.  
PR 09-SEP-2002; 2002US-0409293P.  
PR 15-JAN-2003; 2003US-0440129P.  
XX (RIBO-) RIBOZYME PHARM INC.  
PA Mcswiggen J, Beigelman L;  
XX WPI; 2003-689777/65.  
XX New short interfering nucleic acid downregulates expression of the  
PT telomerase gene useful e.g. for treatment and diagnosis of cancer.  
XX Example 3; SEQ ID NO 275; 145pp; English.  
XX The invention relates to short interfering nucleic acids (siNA) which  
CC downregulate expression of the one or more telomerase genes by RNA  
CC interference. The siNAs may or may not comprise ribonucleotides and may  
CC be double or single stranded. They further comprise sense and antisense  
CC regions, or alternatively are assembled from a sense oligonucleotide and  
CC an antisense oligonucleotide. Specifically, the siNAs include short  
CC interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short  
CC hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,  
CC can contain deoxyribonucleotides, and can be chemically synthesised,  
CC expressed from a vector or enzymatically synthesised. The invention also  
CC relates to kits for the in vitro or in vivo delivery of siNA; conjugates  
CC and/or complexes of siNA; and vectors that express siNA. The siNAs are  
CC used to modulate expression of the telomerase genes in cells, tissue  
CC explants or organisms (e.g., by ex vivo gene therapy), or in grafts and  
CC transplants for the treatment of a variety of conditions. They may be  
CC used for treating cancer, restenosis, infectious diseases (specifically  
CC protozoal), transplant rejection, or autoimmune or age-related diseases,  
CC e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,  
CC skin ulcers and rheumatoid arthritis. The siNAs are also useful for drug  
CC screening, diagnosis, therapeutic target identification and validation,  
CC genetic engineering, pharmacogenomics, studying gene function, and gene  
CC mapping (e.g., of single nucleotide polymorphisms). The present sequence  
CC represents the lower strand of a human TERC-targeted double-stranded  
CC siNA.  
XX Sequence 19 BP; 7 A; 4 C; 8 G; 0 T; 0 U; 0 Other;  
SQ Query Match 4.2%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 1.5e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 86 TCCCGCGCGCTGTTTTC 104  
DB 19 TCCCGCGCGCTGTTTTC 1  
RESULT 196  
ADF93550/c  
ID ADF93550 standard; RNA; 19 BP.  
XX ADF93550;  
AC ADF93550;  
XX 26-FEB-2004 (first entry)  
DT Human TERC siNA lower strand, SEQ ID 277.  
DE Cytostatic; vasotropic; protozoacide; immunosuppressive; dermatological;  
XX neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;  
KW antiarthritic; antiinflammatory; gene therapy; telomerase; human; terc;  
KW RNA interference; short interfering nucleic acid; siNA;  
KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;  
KW short hairpin RNA; shRNA; expression modulation; gene therapy;  
KW drug screening; diagnosis; therapeutic target identification;

KW pharmacogenomics; gene function analysis; gene mapping; TERC; TERT; ss.  
XX Homo sapiens.  
OS WO2003070742-A1.  
PN 28-AUG-2003.  
PD 11-FEB-2003; 2003WO-US004088.  
PF 20-FEB-2002; 2002US-0358580P.  
PR 11-MAR-2002; 2002US-0363124P.  
PR 06-JUN-2002; 2002US-0386782P.  
PR 17-JUL-2002; 2002US-0396600P.  
PR 29-AUG-2002; 2002US-0406784P.  
PR 05-SEP-2002; 2002US-0408378P.  
PR 09-SEP-2002; 2002US-0409293P.  
PR 15-JAN-2003; 2003US-0440129P.  
XX (RIBO-) RIBOZYME PHARM INC.  
PA Mcswiggen J, Beigelman L;  
XX WPI; 2003-689777/65.  
XX New short interfering nucleic acid downregulates expression of the  
PT telomerase gene useful e.g. for treatment and diagnosis of cancer.  
XX Example 3; SEQ ID NO 277; 145pp; English.  
XX The invention relates to short interfering nucleic acids (siNA) which  
CC downregulate expression of the one or more telomerase genes by RNA  
CC interference. The siNAs may or may not comprise ribonucleotides and may  
CC be double or single stranded. They further comprise sense and antisense  
CC regions, or alternatively are assembled from a sense oligonucleotide and  
CC an antisense oligonucleotide. Specifically, the siNAs include short  
CC interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short  
CC hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,  
CC can contain deoxyribonucleotides, and can be chemically synthesised,  
CC expressed from a vector or enzymatically synthesised. The invention also  
CC relates to kits for the in vitro or in vivo delivery of siNA; conjugates  
CC and/or complexes of siNA; and vectors that express siNA. The siNAs are  
CC used to modulate expression of the telomerase genes in cells, tissue  
CC explants or organisms (e.g., by ex vivo gene therapy), or in grafts and  
CC transplants for the treatment of a variety of conditions. They may be  
CC used for treating cancer, restenosis, infectious diseases (specifically  
CC protozoal), transplant rejection, or autoimmune or age-related diseases,  
CC e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,  
CC skin ulcers and rheumatoid arthritis. The siNAs are also useful for drug  
CC screening, diagnosis, therapeutic target identification and validation,  
CC genetic engineering, pharmacogenomics, studying gene function, and gene  
CC mapping (e.g., of single nucleotide polymorphisms). The present sequence  
CC represents the lower strand of a human TERC-targeted double-stranded  
CC siNA.  
XX Sequence 19 BP; 2 A; 7 C; 6 G; 0 T; 4 U; 0 Other;  
SQ Query Match 4.2%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 1.5e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 122 GCGGAAAAGCCTCGGCCTG 140  
DB 19 GCGGAAAAGCCTCGGCCTG 1  
RESULT 197  
ADF93555/c  
ID ADF93555 standard; RNA; 19 BP.  
XX ADF93555;  
AC ADF93555;  
XX 26-FEB-2004 (first entry)  
DT

XX	DE	Human TERC siNA lower strand, SEQ ID 282.	Db	19	CTCGGGGGTGCCTGCC	1
XX	DE	Cytostatic; vasotropic; protozoicide; immunosuppressive; dermatological;	RESULT 198			
XX	KW	neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;	ADF93556/c			
KW	KW	antiarthritic; antiinflammatory; gene therapy; telomerase; human; terc;	ID	ADF93556	standard; RNA; 19 BP.	
KW	KW	RNA interference; short interfering nucleic acid; siNA;	XX			
KW	KW	short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;	AC	ADF93556;		
KW	KW	short hairpin RNA; shRNA; expression modulation; gene therapy;	XX			
KW	KW	drug screening; diagnosis; therapeutic target identification;	DT	26-FEB-2004	(first entry)	
KW	KW	pharmacogenomics; gene function analysis; gene mapping; TERC; TERT; ss.	XX			
XX	OS	Homo sapiens.	DE	Human TERC siNA lower strand, SEQ ID 283.		
XX	XX		XX			
XX	KN	WO2003070742-A1.	KW	Cytostatic; vasotropic; protozoicide; immunosuppressive; dermatological;		
XX	PD	28-AUG-2003.	KW	neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;		
XX	XX		KW	antiarthritic; antiinflammatory; gene therapy; telomerase; human; terc;		
XX	XX		KW	RNA interference; short interfering nucleic acid; siNA;		
XX	XX		KW	short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;		
XX	XX		KW	short hairpin RNA; shRNA; expression modulation; gene therapy;		
XX	XX		KW	drug screening; diagnosis; therapeutic target identification;		
XX	XX		KW	pharmacogenomics; gene function analysis; gene mapping; TERC; TERT; ss.		
XX	XX		XX	Homo sapiens.		
XX	XX		XX	WO2003070742-A1.		
XX	XX		XX	28-AUG-2003.		
XX	XX		XX	11-FEB-2003; 2003WO-US004088.		
XX	XX		XX	20-FEB-2002; 2002US-0358580P.		
XX	XX		XX	11-MAR-2002; 2002US-0363124P.		
XX	XX		XX	06-JUN-2002; 2002US-0386782P.		
XX	XX		XX	17-JUL-2002; 2002US-0396600P.		
XX	XX		XX	29-AUG-2002; 2002US-0406784P.		
XX	XX		XX	05-SEP-2002; 2002US-0408378P.		
XX	XX		XX	09-SEP-2002; 2002US-0409293P.		
XX	XX		XX	15-JAN-2003; 2003US-0440129P.		
XX	XX		XX	(RIBO-) RIBOZYME PHARM INC.		
XX	XX		XX	Mcswiggen J, Beigelman L;		
XX	XX		XX	WPI; 2003-689777/65.		
XX	XX		XX	New short interfering nucleic acid downregulates expression of the		
XX	XX		XX	telomerase gene useful e.g. for treatment and diagnosis of cancer.		
XX	XX		XX	Example 3; SEQ ID NO 282; 145pp; English.		
XX	XX		XX	The invention relates to short interfering nucleic acids (siNA) which		
XX	XX		XX	downregulate expression of the one or more telomerase genes by RNA		
XX	XX		XX	interference. The siNAs may or may not comprise ribonucleotides and may		
XX	XX		XX	be double or single stranded. They further comprise sense and antisense		
XX	XX		XX	regions, or alternatively are assembled from a sense oligonucleotide and		
XX	XX		XX	an antisense oligonucleotide. Specifically, the siNAs include short		
XX	XX		XX	interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short		
XX	XX		XX	hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,		
XX	XX		XX	can contain deoxyribonucleotides, and can be chemically synthesised,		
XX	XX		XX	expressed from a vector or enzymatically synthesised. The invention also		
XX	XX		XX	relates to kits for the in vitro or in vivo delivery of siNA; conjugates		
XX	XX		XX	and/or complexes of siNA; and vectors that express siNA. The siNAs are		
XX	XX		XX	used to modulate expression of the telomerase genes in cells, tissue		
XX	XX		XX	explants or organisms (e.g., by ex vivo gene therapy), or in grafts and		
XX	XX		XX	transplants for the treatment of a variety of conditions. They may be		
XX	XX		XX	used for treating cancer, restenosis, infectious diseases (specifically		
XX	XX		XX	protozoal), transplant rejection, or autoimmune or age-related diseases,		
XX	XX		XX	e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,		
XX	XX		XX	skin ulcers and rheumatoid arthritis. The siNAs are also useful for drug		
XX	XX		XX	screening, diagnosis, therapeutic target identification and validation,		
XX	XX		XX	genetic engineering, pharmacogenomics, studying gene function, and gene		
XX	XX		XX	mapping (e.g., of single nucleotide polymorphisms). The present sequence		
XX	XX		XX	represents the lower strand of a human TERC-targeted double-stranded		
XX	XX		XX	siNA.		
XX	XX		XX	Sequence 19 BP; 3 A; 8 C; 8 G; 0 T; 0 U; 0 Other;		
XX	XX		XX	Query Match	4.2%;	Score 19; DB 1; Length 19;
XX	XX		XX	Best Local Similarity	100.0%;	Pred. No. 1.5e+02;
XX	XX		XX	Matches	19; Conservative	0; Mismatches 0; Indels 0; Gaps 0;
XX	XX		XX	212	CTCGGGGGTGCCTGCC	230
XX	XX		XX			

```
CC siNA.
XX
SQ Sequence 19 BP; 0 A; 3 C; 13 G; 0 T; 3 U; 0 Other;

Query Match 4.2%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 1.5e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 230 CCAGCCCCCGAACCCCGCC 248
Db 19 CCAGCCCCCGAACCCCGCC 1

RESULT 199
ADF93291
ID ADF93291 standard; RNA; 19 BP.
AC ADF93291;
DT 26-FEB-2004 (first entry)
DE Human TERC transcript target sequence/siNA upper strand, SEQ ID 8.
XX
KW Cytostatic; vasotropic; protozoacide; immunosuppressive; dermatological;
KW neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;
KW antiarthritic; antiinflammatory; gene therapy; telomerase; human; terc;
KW RNA interference; short interfering nucleic acid; siNA;
KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;
KW short hairpin RNA; shRNA; expression modulation; gene therapy;
KW drug screening; diagnosis; therapeutic target identification;
KW pharmacogenomics; gene function analysis; gene mapping; TERC; TERT; ss.
XX
OS Homo sapiens.
XX
PN WO2003070742-A1.
XX
PD 28-AUG-2003.
XX
PF 11-FEB-2003; 2003WO-US004088.
XX
PR 20-FEB-2002; 2002US-0358580P.
PR 11-MAR-2002; 2002US-0363124P.
PR 06-JUN-2002; 2002US-0386782P.
PR 17-JUL-2002; 2002US-0396600P.
PR 29-AUG-2002; 2002US-0406784P.
PR 05-SEP-2002; 2002US-0408378P.
PR 09-SEP-2002; 2002US-0409293P.
PR 15-JAN-2003; 2003US-0440129P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Mcswiggen J, Beigelman L;
XX
DR WPI; 2003-689777/65.
XX
PT New short interfering nucleic acid downregulates expression of the
telomerase gene useful e.g. for treatment and diagnosis of cancer.
XX
PS Example 3; SEQ ID NO 8; 145pp; English.
XX
CC The invention relates to short interfering nucleic acids (siNA) which
downregulate expression of the one or more telomerase genes by RNA
interference. The siNAs may or may not comprise ribonucleotides and may
be double or single stranded. They further comprise sense and antisense
regions, or alternatively are assembled from a sense oligonucleotide and
an antisense oligonucleotide. Specifically, the siNAs include short
interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short
hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,
can contain deoxyribonucleotides, and can be chemically synthesised,
expressed from a vector or enzymatically synthesised. The invention also
relates to kits for the in vitro or in vivo delivery of siNA; conjugates
and/or complexes of siNA; and vectors that express siNA. The siNAs are
used to modulate expression of the telomerase genes in cells, tissue
```

```
CC explants or organisms (e.g., by ex vivo gene therapy), or in grafts and
transplants for the treatment of a variety of conditions. They may be
used for treating cancer, restenosis, infectious diseases (specifically
protocol), transplant rejection, or autoimmune or age-related diseases,
e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,
skin ulcers and rheumatoid arthritis. The siNAs are also useful for drug
screening, diagnosis, therapeutic target identification and validation,
genetic engineering, pharmacogenomics, studying gene function, and gene
mapping (e.g., of single nucleotide polymorphisms). The present sequence
represents the upper strand of a human TERC-targeted double-stranded
siNA, which is identical to the c-fos transcript target sequence.
XX
SQ Sequence 19 BP; 3 A; 4 C; 3 G; 0 T; 9 U; 0 Other;

Query Match 4.2%; Score 19; DB 1; Length 19;
Best Local Similarity 52.6%; Pred. No. 1.5e+02;
Matches 10; Conservative 9; Mismatches 0; Indels 0; Gaps 0;

QY 32 TGGCCATTGTTTGTCTAAC 50
Db 1 UGCCCAUUUUUGUCUAC 19

RESULT 200
ADF93302
ID ADF93302 standard; RNA; 19 BP.
XX
AC ADF93302;
XX
DT 26-FEB-2004 (first entry)
DE Human TERC transcript target sequence/siNA upper strand, SEQ ID 19.
XX
KW Cytostatic; vasotropic; protozoacide; immunosuppressive; dermatological;
KW neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;
KW antiarthritic; antiinflammatory; gene therapy; telomerase; human; terc;
KW RNA interference; short interfering nucleic acid; siNA;
KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;
KW short hairpin RNA; shRNA; expression modulation; gene therapy;
KW drug screening; diagnosis; therapeutic target identification;
KW pharmacogenomics; gene function analysis; gene mapping; TERC; TERT; ss.
XX
OS Homo sapiens.
XX
PN WO2003070742-A1.
XX
PD 28-AUG-2003.
XX
PF 11-FEB-2003; 2003WO-US004088.
XX
PR 20-FEB-2002; 2002US-0358580P.
PR 11-MAR-2002; 2002US-0363124P.
PR 06-JUN-2002; 2002US-0386782P.
PR 17-JUL-2002; 2002US-0396600P.
PR 29-AUG-2002; 2002US-0406784P.
PR 05-SEP-2002; 2002US-0408378P.
PR 09-SEP-2002; 2002US-0409293P.
PR 15-JAN-2003; 2003US-0440129P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Mcswiggen J, Beigelman L;
XX
DR WPI; 2003-689777/65.
XX
PT New short interfering nucleic acid downregulates expression of the
telomerase gene useful e.g. for treatment and diagnosis of cancer.
XX
PS Example 3; SEQ ID NO 19; 145pp; English.
XX
CC The invention relates to short interfering nucleic acids (siNA) which
downregulate expression of the one or more telomerase genes by RNA
interference. The siNAs may or may not comprise ribonucleotides and may
```

CC be double or single stranded. They further comprise sense and antisense  
 CC regions, or alternatively are assembled from a sense oligonucleotide and  
 CC an antisense oligonucleotide. Specifically, the siNAs include short  
 CC interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short  
 CC hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,  
 CC can contain deoxyribonucleotides, and can be chemically synthesised,  
 CC expressed from a vector or enzymatically synthesised. The invention also  
 CC relates to kits for the in vitro or in vivo delivery of siNA; conjugates  
 CC used to modulate expression of the telomerase genes in cells, tissue  
 CC explants or organisms (e.g., by ex vivo gene therapy), or in grafts and  
 CC transplants for the treatment of a variety of conditions. They may be  
 CC used for treating cancer, restenosis, infectious diseases (specifically  
 CC protozoal), transplant rejection, or autoimmune or age-related diseases,  
 CC e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,  
 CC skin ulcers and rheumatoid arthritis. The siNAs are also useful for drug  
 CC screening, diagnosis, therapeutic target identification and validation,  
 CC genetic engineering, pharmacogenomics, studying gene function, and gene  
 CC mapping (e.g., of single nucleotide polymorphisms). The present sequence  
 CC represents the upper strand of a human TERC-targeted double-stranded  
 CC siNA, which is identical to the c-fos transcript target sequence.

XX Sequence 19 BP; 3 A; 13 C; 3 G; 0 T; 0 U; 0 Other;

Query Match 4.2%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 1.5e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 230 CCAGCCCCCGAACCCCGCC 248

Db 1 CCAGCCCCCGAACCCCGCC 19

RESULT 201

ADFP3290

ID ADF93290 standard; RNA; 19 BP.

XX AC ADF93290;

XX DT 26-FEB-2004 (first entry)

XX DE Human TERC transcript target sequence/siNA upper strand, SEQ ID 7.

XX Cytostatic; vasotropic; protozoacide; immunosuppressive; dermatological;  
 KW neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;  
 KW antiarthritic; antiinflammatory; gene therapy; telomerase; human; terc;  
 KW RNA interference; short interfering nucleic acid; siNA;  
 KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;  
 KW short hairpin RNA; shRNA; expression modulation; gene therapy;  
 KW drug screening; diagnosis; therapeutic target identification;  
 KW pharmacogenomics; gene function analysis; gene mapping; TERC; TERT; ss.

XX OS Homo sapiens.

XX FN WO2003070742-A1.

XX PD 28-AUG-2003.

XX PF 11-FEB-2003; 2003WO-US004088.

XX PR 20-FEB-2002; 2002US-0358580P.

XX PR 11-MAR-2002; 2002US-0363124P.

XX PR 06-JUN-2002; 2002US-0386782P.

XX PR 17-JUL-2002; 2002US-0396600P.

XX PR 29-AUG-2002; 2002US-0406784P.

XX PR 05-SEP-2002; 2002US-0408378P.

XX PR 09-SEP-2002; 2002US-0409293P.

XX PR 15-JAN-2003; 2003US-0440129P.

XX PA (RIBO-) RIBOZYME PHARM INC.

XX FI Mcswiggen J, Beigelman L;

XX

DR WPT; 2003-689777/65.

XX New short interfering nucleic acid downregulates expression of the  
 PT telomerase gene useful e.g. for treatment and diagnosis of cancer.

XX Example 3; SEQ ID NO 7; 145pp; English.

XX The invention relates to short interfering nucleic acids (siNA) which  
 CC downregulate expression of the one or more telomerase genes by RNA  
 CC interference. The siNAs may or may not comprise ribonucleotides and may  
 CC be double or single stranded. They further comprise sense and antisense  
 CC regions, or alternatively are assembled from a sense oligonucleotide and  
 CC an antisense oligonucleotide. Specifically, the siNAs include short  
 CC interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short  
 CC hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,  
 CC can contain deoxyribonucleotides, and can be chemically synthesised,  
 CC expressed from a vector or enzymatically synthesised. The invention also  
 CC relates to kits for the in vitro or in vivo delivery of siNA; conjugates  
 CC used to modulate expression of the telomerase genes in cells, tissue  
 CC explants or organisms (e.g., by ex vivo gene therapy), or in grafts and  
 CC transplants for the treatment of a variety of conditions. They may be  
 CC used for treating cancer, restenosis, infectious diseases (specifically  
 CC protozoal), transplant rejection, or autoimmune or age-related diseases,  
 CC e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,  
 CC skin ulcers and rheumatoid arthritis. The siNAs are also useful for drug  
 CC screening, diagnosis, therapeutic target identification and validation,  
 CC genetic engineering, pharmacogenomics, studying gene function, and gene  
 CC mapping (e.g., of single nucleotide polymorphisms). The present sequence  
 CC represents the upper strand of a human TERC-targeted double-stranded  
 CC siNA, which is identical to the c-fos transcript target sequence.

XX Sequence 19 BP; 1 A; 2 C; 12 G; 0 T; 4 U; 0 Other;

Query Match 4.2%; Score 19; DB 1; Length 19;

Best Local Similarity 78.9%; Pred. No. 1.5e+02;

Matches 15; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

Oy 14 TGGGCGCTGGGAGGGTGGT 32

Db 1 UGGGCCUGGAGGGUGGU 19

RESULT 202

ADFP3295

ID ADF93295 standard; RNA; 19 BP.

XX AC ADF93295;

XX DT 26-FEB-2004 (first entry)

XX DE Human TERC transcript target sequence/siNA upper strand, SEQ ID 12.

XX Cytostatic; vasotropic; protozoacide; immunosuppressive; dermatological;  
 KW neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;  
 KW antiarthritic; antiinflammatory; gene therapy; telomerase; human; terc;  
 KW RNA interference; short interfering nucleic acid; siNA;  
 KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;  
 KW short hairpin RNA; shRNA; expression modulation; gene therapy;  
 KW drug screening; diagnosis; therapeutic target identification;  
 KW pharmacogenomics; gene function analysis; gene mapping; TERC; TERT; ss.

XX OS Homo sapiens.

XX FN WO2003070742-A1.

XX PD 28-AUG-2003.

XX PF 11-FEB-2003; 2003WO-US004088.

XX PR 20-FEB-2002; 2002US-0358580P.

XX PR 11-MAR-2002; 2002US-0363124P.

XX PR 06-JUN-2002; 2002US-0386782P.



KW Cytostatic; vasotropic; protozoacide; immunosuppressive; dermatological;  
KW neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;  
KW antiarthritic; antiinflammatory; gene therapy; telomerase; human; terc;  
KW RNA interference; short interfering nucleic acid; siRNA;  
KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;  
KW short hairpin RNA; shRNA; expression modulation; gene therapy;  
KW drug screening; diagnosis; therapeutic target identification;  
KW pharmacogenomics; gene function analysis; gene mapping; TERC; TERT; ss.  
OS Homo sapiens.  
XX  
XX WO2003070742-A1.  
XX  
XX 28-AUG-2003.  
XX  
XX 11-FEB-2003; 2003WO-US004088.  
XX  
XX 20-FEB-2002; 2002US-0358580P.  
XX 11-MAR-2002; 2002US-0363124P.  
XX 06-JUN-2002; 2002US-0386782P.  
XX 17-JUL-2002; 2002US-0396600P.  
XX 29-AUG-2002; 2002US-0406784P.  
XX 05-SEP-2002; 2002US-0408378P.  
XX 09-SEP-2002; 2002US-0409293P.  
XX 15-JAN-2003; 2003US-0440129P.  
XX (RIBO-) RIBOZYME PHARM INC.  
XX PA  
XX Mcswiggen J, Beigelman L;  
XX WPI; 2003-689777/65.  
XX  
XX New short interfering nucleic acid downregulates expression of the  
XX telomerase gene useful e.g. for treatment and diagnosis of cancer.  
XX  
XX Example 3; SEQ ID NO 285; 145pp; English.  
XX  
XX The invention relates to short interfering nucleic acids (siNA) which  
XX downregulate expression of the one or more telomerase genes by RNA  
XX interference. The siNAs may or may not comprise ribonucleotides and may  
XX be double or single stranded. They further comprise sense and antisense  
XX regions, or alternatively are assembled from a sense oligonucleotide and  
XX an antisense oligonucleotide. Specifically, the siNAs include short  
XX interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short  
XX hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,  
XX can contain deoxyribonucleotides, and can be chemically synthesised,  
XX expressed from a vector or enzymatically synthesised. The invention also  
XX relates to kits for the in vitro or in vivo delivery of siNA; conjugates  
XX and/or complexes of siNA; and vectors that express siNA. The siNAs are  
XX used for treating cancer, restenosis, infectious diseases (specifically  
XX protozoal), transplant rejection, or autoimmune or age-related diseases,  
XX e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,  
XX skin ulcers and rheumatoid arthritis. The siNAs are also useful for drug  
XX screening, diagnosis, therapeutic target identification and validation,  
XX genetic engineering, pharmacogenomics, studying gene function, and gene  
XX mapping (e.g., of single nucleotide polymorphisms). The present sequence  
XX represents the lower strand of a human TERC-targeted double-stranded  
XX siNA.  
XX  
XX Sequence 19 BP; 3 A; 8 C; 7 G; 0 T; 1 U; 0 Other;  
SQ  
Query Match 4.2%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 1.5e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Oy 266 CCGGGGCTTCTCCGAGGC 284  
Dd 19 CCGGGGCTTCTCCGAGGC 1

RESULT 205  
ID ADF93561 standard; RNA; 19 BP.  
XX  
XX ADF93561;  
XX AC ADF93561;  
XX  
DT 26-FEB-2004 (first entry)  
XX  
XX Human TERC siNA lower strand, SEQ ID 288.  
XX  
XX Cytostatic; vasotropic; protozoacide; immunosuppressive; dermatological;  
KW neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;  
KW antiarthritic; antiinflammatory; gene therapy; telomerase; human; terc;  
KW RNA interference; short interfering nucleic acid; siNA;  
KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;  
KW short hairpin RNA; shRNA; expression modulation; gene therapy;  
KW drug screening; diagnosis; therapeutic target identification;  
KW pharmacogenomics; gene function analysis; gene mapping; TERC; TERT; ss.  
XX Homo sapiens.  
OS  
XX  
XX WO2003070742-A1.  
XX  
XX 28-AUG-2003.  
XX  
XX 11-FEB-2003; 2003WO-US004088.  
XX  
XX 20-FEB-2002; 2002US-0358580P.  
XX 11-MAR-2002; 2002US-0363124P.  
XX 06-JUN-2002; 2002US-0386782P.  
XX 17-JUL-2002; 2002US-0396600P.  
XX 29-AUG-2002; 2002US-0406784P.  
XX 05-SEP-2002; 2002US-0408378P.  
XX 09-SEP-2002; 2002US-0409293P.  
XX 15-JAN-2003; 2003US-0440129P.  
XX (RIBO-) RIBOZYME PHARM INC.  
XX PA  
XX Mcswiggen J, Beigelman L;  
XX WPI; 2003-689777/65.  
XX  
XX New short interfering nucleic acid downregulates expression of the  
XX telomerase gene useful e.g. for treatment and diagnosis of cancer.  
XX  
XX Example 3; SEQ ID NO 288; 145pp; English.  
XX  
XX The invention relates to short interfering nucleic acids (siNA) which  
XX downregulate expression of the one or more telomerase genes by RNA  
XX interference. The siNAs may or may not comprise ribonucleotides and may  
XX be double or single stranded. They further comprise sense and antisense  
XX regions, or alternatively are assembled from a sense oligonucleotide and  
XX an antisense oligonucleotide. Specifically, the siNAs include short  
XX interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short  
XX hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,  
XX can contain deoxyribonucleotides, and can be chemically synthesised,  
XX expressed from a vector or enzymatically synthesised. The invention also  
XX relates to kits for the in vitro or in vivo delivery of siNA; conjugates  
XX and/or complexes of siNA; and vectors that express siNA. The siNAs are  
XX used to modulate expression of the telomerase genes in cells, tissue  
XX explants or organisms (e.g., by ex vivo gene therapy), or in grafts and  
XX transplants for the treatment of a variety of conditions. They may be  
XX used for treating cancer, restenosis, infectious diseases (specifically  
XX protozoal), transplant rejection, or autoimmune or age-related diseases,  
XX e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,  
XX skin ulcers and rheumatoid arthritis. The siNAs are also useful for drug  
XX screening, diagnosis, therapeutic target identification and validation,  
XX genetic engineering, pharmacogenomics, studying gene function, and gene  
XX mapping (e.g., of single nucleotide polymorphisms). The present sequence  
XX represents the lower strand of a human TERC-targeted double-stranded  
XX siNA.  
XX  
XX Sequence 19 BP; 3 A; 9 C; 7 G; 0 T; 0 U; 0 Other;  
SQ





CC interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short  
 CC hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,  
 CC can contain deoxyribonucleotides, and can be chemically synthesised,  
 CC expressed from a vector or enzymatically synthesised. The invention also  
 CC relates to kits for the in vitro or in vivo delivery of siNA; conjugates  
 CC and/or complexes of siNA; and vectors that express siNA. The siNAs are  
 CC used to modulate expression of the telomerase genes in cells, tissue  
 CC explants or organisms (e.g., by ex vivo gene therapy), or in grafts and  
 CC transplants for the treatment of a variety of conditions. They may be  
 CC used for treating cancer, restenosis, infectious diseases (specifically  
 CC e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,  
 CC skin ulcers and rheumatoid arthritis. The siNAs are also useful for drug  
 CC screening, diagnosis, therapeutic target identification and validation,  
 CC genetic engineering, pharmacogenomics, studying gene function, and gene  
 CC mapping (e.g., of single nucleotide polymorphisms). The present sequence  
 CC represents the upper strand of a human TERC-targeted double-stranded  
 CC siNA, which is identical to the c-fos transcript target sequence.  
 XX  
 SQ Sequence 19 BP; 5 A; 5 C; 6 G; 0 T; 3 U; 0 Other;  
 Query Match 4.2%; Score 19; DB 1; Length 19;  
 Best Local Similarity 84.2%; Pred. No. 1.5e+02;  
 Matches 16; Conservative 3; Mismatches 0; Indels 0; Gaps 0;  
 Qy 356 CTTTCAGGCCCGCAGGAAGA 374  
 Db 1 CUUUCAGGCCCGCAGGAAGA 19  
 RESULT 208  
 ADF93310  
 ID ADF93310 standard; RNA; 19 BP.  
 AC ADF93310;  
 DT 26-FEB-2004 (first entry)  
 XX Human TERC transcript target sequence/siNA upper strand, SEQ ID 27.  
 KW Cytostatic; vasotropic; protozoacide; immunosuppressive; dermatological;  
 KW neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;  
 KW antiarthritic; antiinflammatory; gene therapy; telomerase; human; terc;  
 KW RNA interference; short interfering nucleic acid; siNA;  
 KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;  
 KW short hairpin RNA; shRNA; expression modulation; gene therapy;  
 KW drug screening; diagnosis; therapeutic target identification;  
 KW pharmacogenomics; gene function analysis; gene mapping; TERC; TERT; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2003070742-A1.  
 XX 28-AUG-2003.  
 XX  
 PF 11-FEB-2003; 2003WO-US004088.  
 XX  
 PR 20-FEB-2002; 2002US-0358580P.  
 PR 11-MAR-2002; 2002US-0363124P.  
 PR 06-JUN-2002; 2002US-0386782P.  
 PR 17-JUL-2002; 2002US-0396600P.  
 PR 29-AUG-2002; 2002US-0406784P.  
 PR 05-SEP-2002; 2002US-0408378P.  
 PR 09-SEP-2002; 2002US-0409293P.  
 PR 15-JAN-2003; 2003US-0440129P.  
 XX  
 PA (RIBO-) RIBOZYME PHARM INC.  
 XX  
 PI Mcswiggen J, Beigelman L;  
 XX  
 XX WPT; 2003-689777/65.  
 DR  
 XX New short interfering nucleic acid downregulates expression of the

PT telomerase gene useful e.g. for treatment and diagnosis of cancer.  
 XX  
 PS Example 3; SEQ ID NO 27; 145pp; English.  
 XX  
 CC The invention relates to short interfering nucleic acids (siNA) which  
 CC downregulate expression of the one or more telomerase genes by RNA  
 CC interference. The siNAs may or may not comprise ribonucleotides and may  
 CC be double or single stranded. They further comprise sense and antisense  
 CC regions, or alternatively are assembled from a sense oligonucleotide and  
 CC an antisense oligonucleotide. Specifically, the siNAs include short  
 CC interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short  
 CC hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,  
 CC can contain deoxyribonucleotides, and can be chemically synthesised,  
 CC expressed from a vector or enzymatically synthesised. The invention also  
 CC relates to kits for the in vitro or in vivo delivery of siNA; conjugates  
 CC and/or complexes of siNA; and vectors that express siNA. The siNAs are  
 CC used to modulate expression of the telomerase genes in cells, tissue  
 CC explants or organisms (e.g., by ex vivo gene therapy), or in grafts and  
 CC transplants for the treatment of a variety of conditions. They may be  
 CC used for treating cancer, restenosis, infectious diseases (specifically  
 CC e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,  
 CC skin ulcers and rheumatoid arthritis. The siNAs are also useful for drug  
 CC screening, diagnosis, therapeutic target identification and validation,  
 CC genetic engineering, pharmacogenomics, studying gene function, and gene  
 CC mapping (e.g., of single nucleotide polymorphisms). The present sequence  
 CC represents the upper strand of a human TERC-targeted double-stranded  
 CC siNA, which is identical to the c-fos transcript target sequence.  
 XX  
 SQ Sequence 19 BP; 5 A; 6 C; 7 G; 0 T; 1 U; 0 Other;  
 Query Match 4.2%; Score 19; DB 1; Length 19;  
 Best Local Similarity 94.7%; Pred. No. 1.5e+02;  
 Matches 18; Conservative 1; Mismatches 0; Indels 0; Gaps 0;  
 Qy 374 AGGAACGGAGCGAGTCCCC 392  
 Db 1 AGGAACGGAGCGAGUCCCC 19  
 RESULT 209  
 ADF93292  
 ID ADF93292 standard; RNA; 19 BP.  
 XX ADF93292;  
 AC ADF93292;  
 DT 26-FEB-2004 (first entry)  
 XX Human TERC transcript target sequence/siNA upper strand, SEQ ID 9.  
 KW Cytostatic; vasotropic; protozoacide; immunosuppressive; dermatological;  
 KW neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;  
 KW antiarthritic; antiinflammatory; gene therapy; telomerase; human; terc;  
 KW RNA interference; short interfering nucleic acid; siNA;  
 KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;  
 KW short hairpin RNA; shRNA; expression modulation; gene therapy;  
 KW drug screening; diagnosis; therapeutic target identification;  
 KW pharmacogenomics; gene function analysis; gene mapping; TERC; TERT; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2003070742-A1.  
 XX 28-AUG-2003.  
 XX  
 PF 11-FEB-2003; 2003WO-US004088.  
 XX  
 PR 20-FEB-2002; 2002US-0358580P.  
 PR 11-MAR-2002; 2002US-0363124P.  
 PR 06-JUN-2002; 2002US-0386782P.  
 PR 17-JUL-2002; 2002US-0396600P.  
 PR 29-AUG-2002; 2002US-0406784P.  
 PR 05-SEP-2002; 2002US-0408378P.  
 PR 09-SEP-2002; 2002US-0409293P.  
 PR 15-JAN-2003; 2003US-0440129P.  
 XX  
 PA (RIBO-) RIBOZYME PHARM INC.  
 XX  
 PI Mcswiggen J, Beigelman L;  
 XX  
 XX WPT; 2003-689777/65.  
 DR  
 XX New short interfering nucleic acid downregulates expression of the

PR	09-SEP-2002; 2002US-0409293P.	PD	28-AUG-2003.
PR	15-JAN-2003; 2003US-0440129P.	XX	
XX		PF	11-FEB-2003; 2003WO-US004088.
XX		XX	
PA	(RIBO-) RIBOZYME PHARM INC.	XX	
XX		PR	20-FEB-2002; 2002US-0358580P.
PI	Mcswiggen J, Beigelman L;	PR	11-MAR-2002; 2002US-0363124P.
XX		PR	06-JUN-2002; 2002US-0386782P.
XX		PR	17-JUL-2002; 2002US-0396600P.
DR	WPI; 2003-689777/65.	PR	29-AUG-2002; 2002US-0406784P.
XX		PR	05-SEP-2002; 2002US-0408378P.
PT	New short interfering nucleic acid downregulates expression of the	PR	09-SEP-2002; 2002US-0409293P.
PT	telomerase gene useful e.g. for treatment and diagnosis of cancer.	PR	15-JAN-2003; 2003US-0440129P.
PS	Example 3; SEQ ID NO 9; 145pp; English.	XX	
XX		PA	(RIBO-) RIBOZYME PHARM INC.
XX		XX	
CC	The invention relates to short interfering nucleic acids (siNA) which	PI	Mcswiggen J, Beigelman L;
CC	downregulate expression of the one or more telomerase genes by RNA	XX	
CC	interference. The siNAs may or may not comprise ribonucleotides and may	XX	
CC	be double or single stranded. They further comprise sense and antisense	DR	WPI; 2003-689777/65.
CC	regions, or alternatively are assembled from a sense oligonucleotide and	XX	
CC	an antisense oligonucleotide. Specifically, the siNAs include short	PT	New short interfering nucleic acid downregulates expression of the
CC	interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short	PT	telomerase gene useful e.g. for treatment and diagnosis of cancer.
CC	hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,	XX	
CC	can contain deoxyribonucleotides, and can be chemically synthesised,	PS	Example 3; SEQ ID NO 15; 145pp; English.
CC	expressed from a vector or enzymatically synthesised. The invention also	XX	
CC	relates to kits for the in vitro or in vivo delivery of siNA; conjugates	CC	The invention relates to short interfering nucleic acids (siNA) which
CC	and/or complexes of siNA; and vectors that express siNA. The siNAs are	CC	downregulate expression of the one or more telomerase genes by RNA
CC	used to modulate expression of the telomerase genes in cells, tissue	CC	interference. The siNAs may or may not comprise ribonucleotides and may
CC	explants or organisms (e.g., by ex vivo gene therapy), or in grafts and	CC	be double or single stranded. They further comprise sense and antisense
CC	transplants for the treatment of a variety of conditions. They may be	CC	regions, or alternatively are assembled from a sense oligonucleotide and
CC	used for treating cancer, restenosis, infectious diseases (specifically	CC	an antisense oligonucleotide. Specifically, the siNAs include short
CC	e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,	CC	interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short
CC	skin ulcers and rheumatoid arthritis. The siNAs are also useful for drug	CC	hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,
CC	screening, diagnosis, therapeutic target identification and validation,	CC	can contain deoxyribonucleotides, and can be chemically synthesised,
CC	genetic engineering, pharmacogenomics, studying gene function, and gene	CC	expressed from a vector or enzymatically synthesised. The invention also
CC	mapping (e.g., of single nucleotide polymorphisms). The present sequence	CC	relates to kits for the in vitro or in vivo delivery of siNA; conjugates
CC	represents the upper strand of a human TERC-targeted double-stranded	CC	and/or complexes of siNA; and vectors that express siNA. The siNAs are
CC	siNA, which is identical to the c-fos transcript target sequence.	CC	used to modulate expression of the telomerase genes in cells, tissue
XX		CC	explants or organisms (e.g., by ex vivo gene therapy), or in grafts and
SQ	Sequence 19 BP; 5 A; 5 C; 6 G; 0 T; 3 U; 0 Other;	CC	transplants for the treatment of a variety of conditions. They may be
		CC	used for treating cancer, restenosis, infectious diseases (specifically
		CC	e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,
		CC	skin ulcers and rheumatoid arthritis. The siNAs are also useful for drug
		CC	screening, diagnosis, therapeutic target identification and validation,
		CC	genetic engineering, pharmacogenomics, studying gene function, and gene
		CC	mapping (e.g., of single nucleotide polymorphisms). The present sequence
		CC	represents the upper strand of a human TERC-targeted double-stranded
		CC	siNA, which is identical to the c-fos transcript target sequence.
		XX	
		SQ	Sequence 19 BP; 11 A; 3 C; 2 G; 0 T; 3 U; 0 Other;
		Query Match	4.2%; Score 19; DB 1; Length 19;
		Best Local Similarity	84.2%; Pred. No. 1.5e+02;
		Matches	16; Conservative 3; Mismatches 0; Indels 0; Gaps 0;
QY	50 CCCTAACTGAGAGGGCGT 68		
Db	1 CCUACUGAGAGGGCGU 19		
		RESULT 210	
		ADF93298	
ID	ADF93298 standard; RNA; 19 BP.		
XX		XX	
AC	ADF93298;		
XX			
DT	26-FEB-2004 (first entry)		
XX			
DE	Human TERC transcript target sequence/siNA upper strand, SEQ ID 15.		
XX			
KW	Cytostatic; vasotropic; protozoacide; immunosuppressive; dermatological;		
KW	neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;		
KW	antiarthritic; antiinflammatory; gene therapy; telomerase; human; terc;		
KW	RNA interference; short interfering nucleic acid; siNA;		
KW	short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;		
KW	short hairpin RNA; shRNA; expression modulation; gene therapy;		
KW	drug screening; diagnosis; therapeutic target identification;		
KW	pharmacogenomics; gene function analysis; gene mapping; TERC; TERT; ss.		
OS	Homo sapiens.		
XX			
XX			
FN	WO2003070742-A1.		
XX			
		RESULT 211	
		ADF93311	
ID	ADF93311 standard; RNA; 19 BP.		
XX		XX	
AC	ADF93311;		
XX			
DT	26-FEB-2004 (first entry)		
XX			
DE	Human TERC transcript target sequence/siNA upper strand, SEQ ID 28.		
XX			
KW	Cytostatic; vasotropic; protozoacide; immunosuppressive; dermatological;		
KW	neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;		
KW	antiarthritic; antiinflammatory; gene therapy; telomerase; human; terc;		

KW RNA interference; short interfering nucleic acid; siRNA;  
 KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;  
 KW short hairpin RNA; shRNA; expression modulation; gene therapy;  
 KW drug screening; diagnosis; therapeutic target identification;  
 KW pharmacogenomics; gene function analysis; gene mapping; TERC; TERT; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2003070742-A1.  
 XX  
 PD 28-AUG-2003.  
 XX  
 XX 11-FEB-2003; 2003WO-US004088.  
 XX  
 XX 20-FEB-2002; 2002US-0358580P.  
 PR 11-MAR-2002; 2002US-0363124P.  
 PR 06-JUN-2002; 2002US-0386782P.  
 PR 17-JUL-2002; 2002US-0396600P.  
 PR 29-AUG-2002; 2002US-0406784P.  
 PR 05-SEP-2002; 2002US-0408378P.  
 PR 09-SEP-2002; 2002US-0409293P.  
 PR 15-JAN-2003; 2003US-0440129P.  
 XX  
 PA (RIBO-) RIBOZYME PHARM INC.  
 XX  
 XX Mcswiggen J, Beigelman L;  
 PI  
 XX WPI; 2003-689777/65.  
 DR  
 XX  
 XX New short interfering nucleic acid downregulates expression of the  
 PT telomerase gene useful e.g. for treatment and diagnosis of cancer.  
 PT  
 XX Example 3; SEQ ID NO 28; 145pp; English.  
 PS  
 XX The invention relates to short interfering nucleic acids (siNA) which  
 CC downregulate expression of the one or more telomerase genes by RNA  
 CC interference. The siNAs may or may not comprise ribonucleotides and may  
 CC be double or single stranded. They further comprise sense and antisense  
 CC regions, or alternatively are assembled from a sense oligonucleotide and  
 CC an antisense oligonucleotide. Specifically, the siNAs include short  
 CC interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short  
 CC hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,  
 CC can contain deoxyribonucleotides, and can be chemically synthesised,  
 CC expressed from a vector or enzymatically synthesised. The invention also  
 CC relates to kits for the in vitro or in vivo delivery of siNA; conjugates  
 CC and/or complexes of siNA; and vectors that express siNA. The siNAs are  
 CC used to modulate expression of the telomerase genes in cells, tissue  
 CC explants or organisms (e.g., by ex vivo gene therapy), or in grafts and  
 CC transplants for the treatment of a variety of conditions. They may be  
 CC used for treating cancer, restenosis, or autoimmune or age-related diseases,  
 CC e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,  
 CC skin ulcers and rheumatoid arthritis. The siNAs are also useful for drug  
 CC screening, diagnosis, therapeutic target identification and validation,  
 CC genetic engineering, pharmacogenomics, studying gene function, and gene  
 CC mapping (e.g., of single nucleotide polymorphisms). The present sequence  
 CC represents the upper strand of a human TERC-targeted double-stranded  
 CC siNA, which is identical to the c-fos transcript target sequence.  
 XX  
 XX Sequence 19 BP; 1 A; 9 C; 7 G; 0 T; 2 U; 0 Other;  
 SQ  
 Query Match 4.2%; Score 19; DB 1; Length 19;  
 Best Local Similarity 89.5%; Pred. No. 1.5e+02;  
 Matches 17; Conservative 2; Mismatches 0; Indels 0; Gaps 0;  
 Qy 392 CGCGCGCGCGCGATTCCTCC 410  
 |||||  
 Db 1 CGCGCGCGCGCGAUTCCTCC 19  
 |||||

RESULT 212

ADF93313

ID ADF93313 standard; RNA; 19 BP.

XX ADF93313;  
 AC  
 XX 26-FEB-2004 (first entry)  
 DT  
 XX Human TERC transcript target sequence/siNA upper strand, SEQ ID 30.  
 DE  
 XX Cytostatic; vasotropic; protozoicide; immunosuppressive; dermatological;  
 KW neuroprotective; anti-HIV; ophthalmological; antitumor; antirheumatic;  
 KW antiarthritic; antiinflammatory; gene therapy; telomerase; human; TERC;  
 KW RNA interference; short interfering nucleic acid; siNA;  
 KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;  
 KW short hairpin RNA; shRNA; expression modulation; gene therapy;  
 KW drug screening; diagnosis; therapeutic target identification;  
 KW pharmacogenomics; gene function analysis; gene mapping; TERC; TERT; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2003070742-A1.  
 XX  
 PD 28-AUG-2003.  
 XX  
 XX 11-FEB-2003; 2003WO-US004088.  
 XX  
 XX 20-FEB-2002; 2002US-0358580P.  
 PR 11-MAR-2002; 2002US-0363124P.  
 PR 06-JUN-2002; 2002US-0386782P.  
 PR 17-JUL-2002; 2002US-0396600P.  
 PR 29-AUG-2002; 2002US-0406784P.  
 PR 05-SEP-2002; 2002US-0408378P.  
 PR 09-SEP-2002; 2002US-0409293P.  
 PR 15-JAN-2003; 2003US-0440129P.  
 XX  
 PA (RIBO-) RIBOZYME PHARM INC.  
 XX  
 XX Mcswiggen J, Beigelman L;  
 PI  
 XX WPI; 2003-689777/65.  
 DR  
 XX  
 XX New short interfering nucleic acid downregulates expression of the  
 PT telomerase gene useful e.g. for treatment and diagnosis of cancer.  
 PT  
 XX Example 3; SEQ ID NO 30; 145pp; English.  
 PS  
 XX The invention relates to short interfering nucleic acids (siNA) which  
 CC downregulate expression of the one or more telomerase genes by RNA  
 CC interference. The siNAs may or may not comprise ribonucleotides and may  
 CC be double or single stranded. They further comprise sense and antisense  
 CC regions, or alternatively are assembled from a sense oligonucleotide and  
 CC an antisense oligonucleotide. Specifically, the siNAs include short  
 CC interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short  
 CC hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,  
 CC can contain deoxyribonucleotides, and can be chemically synthesised,  
 CC expressed from a vector or enzymatically synthesised. The invention also  
 CC relates to kits for the in vitro or in vivo delivery of siNA; conjugates  
 CC and/or complexes of siNA; and vectors that express siNA. The siNAs are  
 CC used to modulate expression of the telomerase genes in cells, tissue  
 CC explants or organisms (e.g., by ex vivo gene therapy), or in grafts and  
 CC transplants for the treatment of a variety of conditions. They may be  
 CC used for treating cancer, restenosis, or autoimmune or age-related diseases,  
 CC e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,  
 CC skin ulcers and rheumatoid arthritis. The siNAs are also useful for drug  
 CC screening, diagnosis, therapeutic target identification and validation,  
 CC genetic engineering, pharmacogenomics, studying gene function, and gene  
 CC mapping (e.g., of single nucleotide polymorphisms). The present sequence  
 CC represents the upper strand of a human TERC-targeted double-stranded  
 CC siNA, which is identical to the c-fos transcript target sequence.  
 XX  
 XX Sequence 19 BP; 5 A; 8 C; 4 G; 0 T; 2 U; 0 Other;  
 SQ  
 Query Match 4.2%; Score 19; DB 1; Length 19;  
 Best Local Similarity 89.5%; Pred. No. 1.5e+02;  
 Matches 17; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

Matches 17; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 428 ACCAGGACTCGGCTCACA 446  
|||||||:-|||:||||  
Db 1 ACCAGGACUCGGCUCACA 19

RESULT 213  
ID ADF93557/c  
XX ADF93557 standard; RNA; 19 BP.  
AC ADF93557;  
XX  
DT 26-FEB-2004 (first entry)  
XX  
DE Human TERC siNA lower strand, SEQ ID 284.  
XX  
KW Cytostatic; vasotropic; protozoacide; immunosuppressive; dermatological;  
KW neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;  
KW antiarthritic; antiinflammatory; gene therapy; telomerase; human; terc;  
KW RNA interference; short interfering nucleic acid; siNA;  
KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;  
KW short hairpin RNA; shRNA; expression modulation; gene therapy;  
KW drug screening; diagnosis; therapeutic target identification;  
KW pharmacogenomics; gene function analysis; gene mapping; TERC; TERT; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO2003070742-A1.  
XX  
PD 28-AUG-2003.  
XX  
PF 11-FEB-2003; 2003WO-US004088.  
XX  
PR 20-FEB-2002; 2002US-0358580P.  
PR 11-MAR-2002; 2002US-0363124P.  
PR 06-JUN-2002; 2002US-0386782P.  
PR 17-JUL-2002; 2002US-0396600P.  
PR 29-AUG-2002; 2002US-0406784P.  
PR 05-SEP-2002; 2002US-0408378P.  
PR 09-SEP-2002; 2002US-0409293P.  
PR 15-JAN-2003; 2003US-0440129P.  
XX  
PA (RIBO-) RIBOZYME PHARM INC.  
XX  
PI Mcswiggen J, Beigelman L;  
XX  
XX WPI; 2003-689777/65.  
XX  
XX New short interfering nucleic acid downregulates expression of the  
XX telomerase gene useful e.g. for treatment and diagnosis of cancer.  
XX  
XX Example 3; SEQ ID NO 284; 145pp; English.  
XX  
XX The invention relates to short interfering nucleic acids (siNA) which  
XX downregulate expression of the one or more telomerase genes by RNA  
XX interference. The siNAs may or may not comprise ribonucleotides and may  
XX be double or single stranded. They further comprise sense and antisense  
XX regions, or alternatively are assembled from a sense oligonucleotide and  
XX an antisense oligonucleotide. Specifically, the siNAs include short  
XX interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short  
XX hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,  
XX can contain deoxyribonucleotides, and can be chemically synthesised,  
XX expressed from a vector or enzymatically synthesised. The invention also  
XX relates to kits for the in vitro or in vivo delivery of siNA; conjugates  
XX and/or complexes of siNA; and vectors that express siNA. The siNAs are  
XX used to modulate expression of the telomerase genes in cells, tissue  
XX explants or organisms (e.g., by ex vivo gene therapy), or in grafts and  
XX transplants for the treatment of a variety of conditions. They may be  
XX used for treating cancer, restenosis, infectious diseases (specifically  
XX protozoal), transplant rejection, or autoimmune or age-related diseases,  
XX e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,  
XX skin ulcers and rheumatoid arthritis. The siNAs are also useful for drug

CC screening, diagnosis, therapeutic target identification and validation,  
CC genetic engineering, pharmacogenomics, studying gene function, and gene  
CC mapping (e.g., of single nucleotide polymorphisms). The present sequence  
CC represents the lower strand of a human TERC-targeted double-stranded  
CC siNA.  
XX  
SQ Sequence 19 BP; 2 A; 9 C; 7 G; 0 T; 1 U; 0 Other;  
Query Match 4.2%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 1.5e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 248 CTGGAGCGCGGTGGCC 286  
|||||||:-|||:||||  
Db 19 CTGGAGCGCGGTGGCC 1

RESULT 214  
ID ADF93565/c  
XX ADF93565 standard; RNA; 19 BP.  
AC ADF93565;  
XX  
DT 26-FEB-2004 (first entry)  
XX  
DE Human TERC siNA lower strand, SEQ ID 292.  
XX  
KW Cytostatic; vasotropic; protozoacide; immunosuppressive; dermatological;  
KW neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;  
KW antiarthritic; antiinflammatory; gene therapy; telomerase; human; terc;  
KW RNA interference; short interfering nucleic acid; siNA;  
KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;  
KW short hairpin RNA; shRNA; expression modulation; gene therapy;  
KW drug screening; diagnosis; therapeutic target identification;  
KW pharmacogenomics; gene function analysis; gene mapping; TERC; TERT; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO2003070742-A1.  
XX  
PD 28-AUG-2003.  
XX  
PF 11-FEB-2003; 2003WO-US004088.  
XX  
PR 20-FEB-2002; 2002US-0358580P.  
PR 11-MAR-2002; 2002US-0363124P.  
PR 06-JUN-2002; 2002US-0386782P.  
PR 17-JUL-2002; 2002US-0396600P.  
PR 29-AUG-2002; 2002US-0406784P.  
PR 05-SEP-2002; 2002US-0408378P.  
PR 09-SEP-2002; 2002US-0409293P.  
PR 15-JAN-2003; 2003US-0440129P.  
XX  
PA (RIBO-) RIBOZYME PHARM INC.  
XX  
PI Mcswiggen J, Beigelman L;  
XX  
XX WPI; 2003-689777/65.  
XX  
XX New short interfering nucleic acid downregulates expression of the  
XX telomerase gene useful e.g. for treatment and diagnosis of cancer.  
XX  
XX Example 3; SEQ ID NO 292; 145pp; English.  
XX  
XX The invention relates to short interfering nucleic acids (siNA) which  
XX downregulate expression of the one or more telomerase genes by RNA  
XX interference. The siNAs may or may not comprise ribonucleotides and may  
XX be double or single stranded. They further comprise sense and antisense  
XX regions, or alternatively are assembled from a sense oligonucleotide and  
XX an antisense oligonucleotide. Specifically, the siNAs include short  
XX interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short  
XX hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,  
XX can contain deoxyribonucleotides, and can be chemically synthesised,

CC expressed from a vector or enzymatically synthesised. The invention also  
 CC relates to kits for the in vitro or in vivo delivery of siRNA; conjugates  
 CC and/or complexes of siRNA; and vectors that express siRNA. The siRNAs are  
 CC used to modulate expression of the telomerase genes in cells, tissue  
 CC explants or organisms (e.g., by ex vivo gene therapy), or in grafts and  
 CC transplants for the treatment of a variety of conditions. They may be  
 CC used for treating cancer, restenosis, infectious diseases (specifically  
 CC protozoal), transplant rejection, or autoimmune or age-related diseases,  
 CC e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,  
 CC skin ulcers and rheumatoid arthritis. The siRNAs are also useful for drug  
 CC screening, diagnosis, therapeutic target identification and validation,  
 CC genetic engineering, pharmacogenomics, studying gene function, and gene  
 CC mapping (e.g., of single nucleotide polymorphisms). The present sequence  
 CC represents the lower strand of a human TERC-targeted double-stranded  
 CC siRNA.

XX  
 SQ Sequence 19 BP; 2 A; 7 C; 9 G; 0 T; 1 U; 0 Other;  
 Query Match 4.2%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 1.5e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 392 CGCGCGCGCGCGATTCCC 410  
 Db 19 CGCGCGCGCGCGATTCCC 1

RESULT 215  
 ADF93551/C  
 ID ADF93551 standard; RNA; 19 BP.  
 AC ADF93551;  
 XX  
 XX 26-FEB-2004 (first entry)  
 DT  
 DE Human TERC siRNA lower strand, SEQ ID 278.

XX Cytostatic; vasotropic; protozoacide; immunosuppressive; dermatological;  
 KW neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;  
 KW antiarthritic; antinflammatory; gene therapy; telomerase; human; terc;  
 KW RNA interference; short interfering nucleic acid; siRNA;  
 KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;  
 KW short hairpin RNA; shRNA; expression modulation; gene therapy;  
 KW drug screening; diagnosis; therapeutic target identification;  
 KW pharmacogenomics; gene function analysis; gene mapping; TERC; TERT; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2003070742-A1.  
 PN  
 XX 28-AUG-2003.  
 PD  
 XX  
 XX 11-FEB-2003; 2003WO-US004088.  
 PF  
 XX  
 XX 20-FEB-2002; 2002US-0358580P.  
 PR 11-MAR-2002; 2002US-0363124P.  
 PR 06-JUN-2002; 2002US-0386782P.  
 PR 17-JUL-2002; 2002US-0396600P.  
 PR 29-AUG-2002; 2002US-0406784P.  
 PR 05-SEP-2002; 2002US-0408378P.  
 PR 09-SEP-2002; 2002US-0409293P.  
 PR 15-JAN-2003; 2003US-0440129P.  
 XX (RIBO-) RIBOZYME PHARM INC.  
 PA  
 XX Mcswiggen J, Beigelman L;  
 PI  
 XX WPI; 2003-689777/65.  
 DR  
 XX New short interfering nucleic acid downregulates expression of the  
 PT telomerase gene useful e.g. for treatment and diagnosis of cancer.  
 PT  
 XX Example 3; SEQ ID NO 278; 145pp; English.  
 PS

XX The invention relates to short interfering nucleic acids (siRNA) which  
 CC downregulate expression of the one or more telomerase genes by RNA  
 CC interference. The siRNAs may or may not comprise ribonucleotides and may  
 CC be double or single stranded. They further comprise sense and antisense  
 CC regions, or alternatively are assembled from a sense oligonucleotide and  
 CC an antisense oligonucleotide. Specifically, the siRNAs include short  
 CC interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short  
 CC hairpin RNA (shRNA). The siRNAs can be unmodified or chemically modified,  
 CC can contain deoxyribonucleotides, and can be chemically synthesised,  
 CC expressed from a vector or enzymatically synthesised. The invention also  
 CC relates to kits for the in vitro or in vivo delivery of siRNA; conjugates  
 CC and/or complexes of siRNA; and vectors that express siRNA. The siRNAs are  
 CC used to modulate expression of the telomerase genes in cells, tissue  
 CC explants or organisms (e.g., by ex vivo gene therapy), or in grafts and  
 CC transplants for the treatment of a variety of conditions. They may be  
 CC used for treating cancer, restenosis, infectious diseases (specifically  
 CC protozoal), transplant rejection, or autoimmune or age-related diseases,  
 CC e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,  
 CC skin ulcers and rheumatoid arthritis. The siRNAs are also useful for drug  
 CC screening, diagnosis, therapeutic target identification and validation,  
 CC genetic engineering, pharmacogenomics, studying gene function, and gene  
 CC mapping (e.g., of single nucleotide polymorphisms). The present sequence  
 CC represents the lower strand of a human TERC-targeted double-stranded  
 CC siRNA.

XX  
 SQ Sequence 19 BP; 5 A; 3 C; 9 G; 0 T; 2 U; 0 Other;  
 Query Match 4.2%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 1.5e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 140 GCCGCCCTTCCACCGTTTCAT 158  
 Db 19 GCCGCCCTTCCACCGTTTCAT 1

RESULT 216  
 ADF93293  
 ID ADF93293 standard; RNA; 19 BP.  
 AC ADF93293;  
 XX  
 XX 26-FEB-2004 (first entry)  
 DT  
 DE Human TERC transcript target sequence/siRNA upper strand, SEQ ID 10.  
 XX  
 XX Cytostatic; vasotropic; protozoacide; immunosuppressive; dermatological;  
 KW neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;  
 KW antiarthritic; antinflammatory; gene therapy; telomerase; human; terc;  
 KW RNA interference; short interfering nucleic acid; siRNA;  
 KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;  
 KW short hairpin RNA; shRNA; expression modulation; gene therapy;  
 KW drug screening; diagnosis; therapeutic target identification;  
 KW pharmacogenomics; gene function analysis; gene mapping; TERC; TERT; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2003070742-A1.  
 PN  
 XX 28-AUG-2003.  
 PD  
 XX  
 XX 11-FEB-2003; 2003WO-US004088.  
 PF  
 XX  
 XX 20-FEB-2002; 2002US-0358580P.  
 PR 11-MAR-2002; 2002US-0363124P.  
 PR 06-JUN-2002; 2002US-0386782P.  
 PR 17-JUL-2002; 2002US-0396600P.  
 PR 29-AUG-2002; 2002US-0406784P.  
 PR 05-SEP-2002; 2002US-0408378P.  
 PR 09-SEP-2002; 2002US-0409293P.  
 PR 15-JAN-2003; 2003US-0440129P.  
 XX

PA (RIBO-) RIBOZYME PHARM INC.  
XX Mcswiggen J, Beigelman L;  
XX WPI; 2003-689777/65.  
XX New short interfering nucleic acid downregulates expression of the  
PT telomerase gene useful e.g. for treatment and diagnosis of cancer.  
XX Example 3; SEQ ID NO 10; 145pp; English.  
XX The invention relates to short interfering nucleic acids (siNA) which  
CC downregulate expression of the one or more telomerase genes by RNA  
CC interference. The siNAs may or may not comprise ribonucleotides and may  
CC be double or single stranded. They further comprise sense and antisense  
CC regions, or alternatively are assembled from a sense oligonucleotide and  
CC an antisense oligonucleotide. Specifically, the siNAs include short  
CC interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short  
CC hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,  
CC can contain deoxyribonucleotides, and can be chemically synthesised,  
CC expressed from a vector or enzymatically synthesised. The invention also  
CC relates to kits for the in vitro or in vivo delivery of siNA; conjugates  
CC and/or complexes of siNA; and vectors that express siNA. The siNAs are  
CC used to modulate expression of the telomerase genes in cells, tissue  
CC explants or organisms (e.g., by ex vivo gene therapy), or in grafts and  
CC transplants for the treatment of a variety of conditions. They may be  
CC used for treating cancer, restenosis, infectious diseases (specifically  
CC e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,  
CC skin ulcers and rheumatoid arthritis. The siNAs are also useful for drug  
CC screening, diagnosis, therapeutic target identification and validation,  
CC genetic engineering, pharmacogenomics, studying gene function, and gene  
CC mapping (e.g., of single nucleotide polymorphisms). The present sequence  
CC represents the upper strand of a human TERC-targeted double-stranded  
CC siNA, which is identical to the c-fos transcript target sequence.  
XX  
SQ Sequence 19 BP; 1 A; 5 C; 6 G; 0 T; 7 U; 0 Other;  
  
Query Match 4.2%; Score 19; DB 1; Length 19;  
Best Local Similarity 63.2%; Pred. No. 1.5e+02;  
Matches 12; Conservative 7; Mismatches 0; Indels 0; Gaps 0;  
  
QY 68 TAGCGCCGCTTGCTTGGCT 86  
Db :|||||:|||||:|||||:  
1 UAGCGCGCCGCGCUUUGCU 19  
  
RESULT 217  
ADP93546/c  
ID ADF93546 standard; RNA; 19 BP.  
XX  
AC ADF93546;  
XX  
DT 26-FEB-2004 (first entry)  
XX  
DE Human TERC siNA lower strand, SEQ ID 273.  
XX  
KW Cytostatic; vasotropic; protozoacide; immunosuppressive; dermatological;  
KW neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;  
KW antiarthritic; antiinflammatory; gene therapy; telomerase; human; terc;  
KW RNA interference; short interfering nucleic acid; siNA;  
KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;  
KW short hairpin RNA; shRNA; expression modulation; gene therapy;  
KW drug screening; diagnosis; therapeutic target identification;  
KW pharmacogenomics; gene function analysis; gene mapping; TERC; TERT; ss.  
XX  
OS Homo sapiens.  
XX  
XX WO2003070742-A1.  
PN  
XX  
XX 28-AUG-2003.  
PD  
XX  
XX 11-FEB-2003; 2003WO-US0004088.

XX 20-FEB-2002; 2002US-0358580P.  
PR 11-MAR-2002; 2002US-0363124P.  
PR 06-JUN-2002; 2002US-0386782P.  
PR 17-JUL-2002; 2002US-0396600P.  
PR 29-AUG-2002; 2002US-0406784P.  
PR 05-SEP-2002; 2002US-0408378P.  
PR 09-SEP-2002; 2002US-0409293P.  
PR 15-JAN-2003; 2003US-0440129P.  
XX  
PA (RIBO-) RIBOZYME PHARM INC.  
XX  
XX Mcswiggen J, Beigelman L;  
PI WPI; 2003-689777/65.  
XX  
DR New short interfering nucleic acid downregulates expression of the  
XX telomerase gene useful e.g. for treatment and diagnosis of cancer.  
PT  
PT Example 3; SEQ ID NO 273; 145pp; English.  
XX  
XX The invention relates to short interfering nucleic acids (siNA) which  
CC downregulate expression of the one or more telomerase genes by RNA  
CC interference. The siNAs may or may not comprise ribonucleotides and may  
CC be double or single stranded. They further comprise sense and antisense  
CC regions, or alternatively are assembled from a sense oligonucleotide and  
CC an antisense oligonucleotide. Specifically, the siNAs include short  
CC interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short  
CC hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,  
CC can contain deoxyribonucleotides, and can be chemically synthesised,  
CC expressed from a vector or enzymatically synthesised. The invention also  
CC relates to kits for the in vitro or in vivo delivery of siNA; conjugates  
CC and/or complexes of siNA; and vectors that express siNA. The siNAs are  
CC used to modulate expression of the telomerase genes in cells, tissue  
CC explants or organisms (e.g., by ex vivo gene therapy), or in grafts and  
CC transplants for the treatment of a variety of conditions. They may be  
CC used for treating cancer, restenosis, infectious diseases (specifically  
CC e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,  
CC skin ulcers and rheumatoid arthritis. The siNAs are also useful for drug  
CC screening, diagnosis, therapeutic target identification and validation,  
CC genetic engineering, pharmacogenomics, studying gene function, and gene  
CC mapping (e.g., of single nucleotide polymorphisms). The present sequence  
CC represents the lower strand of a human TERC-targeted double-stranded  
CC siNA.  
XX  
XX Sequence 19 BP; 3 A; 6 C; 5 G; 0 T; 5 U; 0 Other;  
SQ  
  
Query Match 4.2%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 1.5e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
  
QY 50 CCCTAACTGAGAGGCGGT 68  
Db :|||||:|||||:|||||:  
19 CCCTAACTGAGAGGCGGT 1  
  
RESULT 218  
ADP93562/c  
ID ADF93562 standard; RNA; 19 BP.  
XX  
AC ADF93562;  
XX  
DT 26-FEB-2004 (first entry)  
XX  
DE Human TERC siNA lower strand, SEQ ID 289.  
XX  
KW Cytostatic; vasotropic; protozoacide; immunosuppressive; dermatological;  
KW neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;  
KW antiarthritic; antiinflammatory; gene therapy; telomerase; human; terc;  
KW RNA interference; short interfering nucleic acid; siNA;  
KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;  
KW short hairpin RNA; shRNA; expression modulation; gene therapy;  
KW pharmacogenomics; gene function analysis; gene mapping; TERC; TERT; ss.

KW drug screening; diagnosis; therapeutic target identification; pharmacogenomics; gene function analysis; gene mapping; TERC; TERC; ss.  
XX  
OS Homo sapiens.  
XX  
PN W02003070742-A1.  
XX  
PD 28-AUG-2003.  
XX  
XX  
PF 11-FEB-2003; 2003WO-US004088.  
XX  
PR 20-FEB-2002; 2002US-0358580P.  
PR 11-MAR-2002; 2002US-0363124P.  
PR 06-JUN-2002; 2002US-0386782P.  
PR 17-JUL-2002; 2002US-0396600P.  
PR 29-AUG-2002; 2002US-0406784P.  
PR 05-SEP-2002; 2002US-0408378P.  
PR 09-SEP-2002; 2002US-0409293P.  
PR 15-JAN-2003; 2003US-0440129P.  
XX  
PA (RIBO-) RIBOZYME PHARM INC.  
XX  
XX Mcswiggen J, Beigelman L;  
XX WPI; 2003-689777/65.  
XX  
XX New short interfering nucleic acid downregulates expression of the telomerase gene useful e.g. for treatment and diagnosis of cancer.  
XX  
XX Example 3; SEQ ID NO 289; 145pp; English.  
XX  
XX The invention relates to short interfering nucleic acids (siNA) which downregulate expression of the one or more telomerase genes by RNA interference. The siNAs may or may not comprise ribonucleotides and may be double or single stranded. They further comprise sense and antisense regions, or alternatively are assembled from a sense oligonucleotide and an antisense oligonucleotide. Specifically, the siNAs include short interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified, can contain deoxyribonucleotides, and can be chemically synthesised, expressed from a vector or enzymatically synthesised. The invention also relates to kits for the in vitro or in vivo delivery of siNA; conjugates used to modulate expression of the telomerase genes in cells, tissue explants or organisms (e.g., by ex vivo gene therapy), or in grafts and/or complexes of siNA; and vectors that express siNA. The siNAs are used for treating cancer, restenosis, infectious diseases (specifically protozoal), transplant rejection, or autoimmune or age-related diseases, e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration, skin ulcers and rheumatoid arthritis. The siNAs are also useful for drug screening, diagnosis, therapeutic target identification and validation, genetic engineering, pharmacogenomics, studying gene function, and gene mapping (e.g., of single nucleotide polymorphisms). The present sequence represents the lower strand of a human TERC-targeted double-stranded siNA.  
XX  
XX Sequence 19 BP; 2 A; 9 C; 5 G; 0 T; 3 U; 0 Other;  
SQ  
Query Match 4.2%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 1.5e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 338 CGAGGGCGAGTTTCAGGCC 356  
D5 19 CGAGGGCGAGTTTCAGGCC 1  
RESULT 219  
ADF93308  
ID ADF93308 standard; RNA; 19 BP.  
XX  
AC ADF93308;  
XX

DT 26-FEB-2004 (first entry)  
XX Human TERC transcript target sequence/siNA upper strand, SEQ ID 25.  
XX  
XX Cytostatic; vasotropic; protozoacide; immunosuppressive; dermatological; neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic; antiarthritic; antiinflammatory; gene therapy; telomerase; human; TERC; RNA interference; short interfering nucleic acid; siNA;  
KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;  
KW short hairpin RNA; shRNA; expression modulation; gene therapy;  
KW drug screening; diagnosis; therapeutic target identification;  
KW pharmacogenomics; gene function analysis; gene mapping; TERC; TERC; ss.  
XX  
XX Homo sapiens.  
OS  
XX W02003070742-A1.  
XX  
XX 28-AUG-2003.  
PD  
XX  
XX 11-FEB-2003; 2003WO-US004088.  
PF  
XX  
XX 20-FEB-2002; 2002US-0358580P.  
PR 11-MAR-2002; 2002US-0363124P.  
PR 06-JUN-2002; 2002US-0386782P.  
PR 17-JUL-2002; 2002US-0396600P.  
PR 29-AUG-2002; 2002US-0406784P.  
PR 05-SEP-2002; 2002US-0408378P.  
PR 09-SEP-2002; 2002US-0409293P.  
PR 15-JAN-2003; 2003US-0440129P.  
XX  
XX (RIBO-) RIBOZYME PHARM INC.  
PA  
XX  
XX Mcswiggen J, Beigelman L;  
XX WPI; 2003-689777/65.  
XX  
XX New short interfering nucleic acid downregulates expression of the telomerase gene useful e.g. for treatment and diagnosis of cancer.  
XX  
XX Example 3; SEQ ID NO 25; 145pp; English.  
XX  
XX The invention relates to short interfering nucleic acids (siNA) which downregulate expression of the one or more telomerase genes by RNA interference. The siNAs may or may not comprise ribonucleotides and may be double or single stranded. They further comprise sense and antisense regions, or alternatively are assembled from a sense oligonucleotide and an antisense oligonucleotide. Specifically, the siNAs include short interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified, can contain deoxyribonucleotides, and can be chemically synthesised, expressed from a vector or enzymatically synthesised. The invention also relates to kits for the in vitro or in vivo delivery of siNA; conjugates used to modulate expression of the telomerase genes in cells, tissue explants or organisms (e.g., by ex vivo gene therapy), or in grafts and/or complexes of siNA; and vectors that express siNA. The siNAs are used for treating cancer, restenosis, infectious diseases (specifically protozoal), transplant rejection, or autoimmune or age-related diseases, e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration, skin ulcers and rheumatoid arthritis. The siNAs are also useful for drug screening, diagnosis, therapeutic target identification and validation, genetic engineering, pharmacogenomics, studying gene function, and gene mapping (e.g., of single nucleotide polymorphisms). The present sequence represents the upper strand of a human TERC-targeted double-stranded siNA, which is identical to the c-fos transcript target sequence.  
XX  
XX Sequence 19 BP; 3 A; 5 C; 9 G; 0 T; 2 U; 0 Other;  
SQ  
Query Match 4.2%; Score 19; DB 1; Length 19;  
Best Local Similarity 89.5%; Pred. No. 1.5e+02;  
Matches 17; Conservative 2; Mismatches 0; Indels 0; Gaps 0;  
QY 338 CGAGGGCGAGTTTCAGGCC 356





used to modulate expression of the telomerase genes in cells, tissue explants or organisms (e.g., by ex vivo gene therapy), or in grafts and transplants for the treatment of a variety of conditions. They may be used for treating cancer, restenosis, infectious diseases (specifically protozoal), transplant rejection, or autoimmune or age-related diseases, e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration, skin ulcers and rheumatoid arthritis. The siNAs are also useful for drug screening, diagnosis, therapeutic target identification and validation, genetic engineering, pharmacogenomics, studying gene function, and gene mapping (e.g., of single nucleotide polymorphisms). The present sequence represents the lower strand of a human TERC-targeted double-stranded siNA.

XX Sequence 19 BP; 4 A; 8 C; 4 G; 0 T; 3 U; 0 Other;

Query Match 4.2%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 1.5e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 410 CTGAGCTGTGGACGTGCA 428  
|||||  
Db 19 CTGAGCTGTGGACGTGCA 1

# RESULT 222

ID ADF93296  
AD F93296 standard; RNA; 19 BP.

XX ADF93296;

DT 26-FEB-2004 (first entry)

DE Human TERC transcript target sequence/siNA upper strand, SEQ ID 13.

XX Cystostatic; vasotropic; protozoacide; immunosuppressive; dermatological;  
KW neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;  
KW antiarthritic; antiinflammatory; gene therapy; telomerase; human; terc;  
KW RNA interference; short interfering nucleic acid; siNA;  
KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;  
KW short hairpin RNA; shRNA; expression modulation; gene therapy;  
KW drug screening; diagnosis; therapeutic target identification;  
KW pharmacogenomics; gene function analysis; gene mapping; TERC; TERT; ss.

XX Homo sapiens.

OS WO2003070742-A1.

PN 28-AUG-2003.

PD 11-FEB-2003; 2003WO-US004088.

XX 20-FEB-2002; 2002US-0358580P.

PR 11-MAR-2002; 2002US-0363124P.

PR 06-JUN-2002; 2002US-0386782P.

PR 17-JUL-2002; 2002US-0396600P.

PR 29-AUG-2002; 2002US-0406784P.

PR 05-SEP-2002; 2002US-0408378P.

PR 09-SEP-2002; 2002US-0409293P.

PR 15-JAN-2003; 2003US-0440129P.

XX (RIBO-) RIBOZYME PHARM INC.

PA Mcswiggen J, Beigelman L;

XX WPI, 2003-689777/65.

DR New short interfering nucleic acid downregulates expression of the

XX telomerase gene useful e.g. for treatment and diagnosis of cancer.

PT Example 3; SEQ ID NO 13; 145pp; English.

XX The invention relates to short interfering nucleic acids (siNA) which

CC downregulate expression of the one or more telomerase genes by RNA

CC interference. The siNAs may or may not comprise ribonucleotides and may be double or single stranded. They further comprise sense and antisense regions, or alternatively are assembled from a sense oligonucleotide and an antisense oligonucleotide. Specifically, the siNAs include short interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified, can contain deoxyribonucleotides, and can be chemically synthesised, expressed from a vector or enzymatically synthesised. The invention also relates to kits for the in vitro or in vivo delivery of siNA; conjugates and/or complexes of siNA; and vectors that express siNA. The siNAs are used to modulate expression of the telomerase genes in cells, tissue explants or organisms (e.g., by ex vivo gene therapy), or in grafts and transplants for the treatment of a variety of conditions. They may be used for treating cancer, restenosis, infectious diseases (specifically protozoal), transplant rejection, or autoimmune or age-related diseases, e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration, skin ulcers and rheumatoid arthritis. The siNAs are also useful for drug screening, diagnosis, therapeutic target identification and validation, genetic engineering, pharmacogenomics, studying gene function, and gene mapping (e.g., of single nucleotide polymorphisms). The present sequence represents the upper strand of a human TERC-targeted double-stranded siNA, which is identical to the c-fos transcript target sequence.

XX Sequence 19 BP; 4 A; 6 C; 7 G; 0 T; 2 U; 0 Other;

Query Match 4.2%; Score 19; DB 1; Length 19;  
Best Local Similarity 89.5%; Pred. No. 1.5e+02;  
Matches 17; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

Qy 122 GCGGAAAAGCTCGGCGCTG 140

Db 1 GCGGAAAAGCTCGGCGCTG 19

# RESULT 223

AD F93544/c  
ID ADF93544 standard; RNA; 19 BP.

XX ADF93544;

DT 26-FEB-2004 (first entry)

DE Human TERC siNA lower strand, SEQ ID 271.

XX Cystostatic; vasotropic; protozoacide; immunosuppressive; dermatological;  
KW neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;  
KW antiarthritic; antiinflammatory; gene therapy; telomerase; human; terc;  
KW RNA interference; short interfering nucleic acid; siNA;  
KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;  
KW short hairpin RNA; shRNA; expression modulation; gene therapy;  
KW drug screening; diagnosis; therapeutic target identification;  
KW pharmacogenomics; gene function analysis; gene mapping; TERC; TERT; ss.

OS Homo sapiens.

XX WO2003070742-A1.

PN 28-AUG-2003.

PD 11-FEB-2003; 2003WO-US004088.

XX 20-FEB-2002; 2002US-0358580P.

PR 11-MAR-2002; 2002US-0363124P.

PR 06-JUN-2002; 2002US-0386782P.

PR 17-JUL-2002; 2002US-0396600P.

PR 29-AUG-2002; 2002US-0406784P.

PR 05-SEP-2002; 2002US-0408378P.

PR 09-SEP-2002; 2002US-0409293P.

PR 15-JAN-2003; 2003US-0440129P.

XX (RIBO-) RIBOZYME PHARM INC.

XX Mcswiggen J, Beigelman L;

XX WPI; 2003-689777/65.  
XX  
XX New short interfering nucleic acid downregulates expression of the  
XX telomerase gene useful e.g. for treatment and diagnosis of cancer.  
XX  
XX Example 3; SEQ ID NO 271; 145pp; English.  
XX  
XX The invention relates to short interfering nucleic acids (siNA) which  
XX downregulate expression of the one or more telomerase genes by RNA  
XX interference. The siNAs may or may not comprise ribonucleotides and may  
XX be double or single stranded. They further comprise sense and antisense  
XX regions, or alternatively are assembled from a sense oligonucleotide and  
XX an antisense oligonucleotide. Specifically, the siNAs include short  
XX interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short  
XX hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,  
XX can contain deoxyribonucleotides, and can be chemically synthesised,  
XX expressed from a vector or enzymatically synthesised. The invention also  
XX relates to kits for the in vitro or in vivo delivery of siNA; conjugates  
XX and/or complexes of siNA; and vectors that express siNA. The siNAs are  
XX used to modulate expression of the telomerase genes in cells, tissue  
XX explants or organisms (e.g., by ex vivo gene therapy), or in grafts and  
XX transplants for the treatment of a variety of conditions. They may be  
XX used for treating cancer, restenosis, or autoimmune or age-related diseases,  
XX (e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,  
XX skin ulcers and rheumatoid arthritis. The siNAs are also useful for drug  
XX screening, diagnosis, therapeutic target identification and validation,  
XX genetic engineering, pharmacogenomics, studying gene function, and gene  
XX mapping (e.g., of single nucleotide polymorphisms). The present sequence  
XX represents the lower strand of a human TERC-targeted double-stranded  
XX siNA.  
XX  
XX Sequence 19 BP; 4 A; 12 C; 2 G; 0 T; 1 U; 0 Other;  
XX  
XX  
XX Query Match 4.2%; Score 19; DB 1; Length 19;  
XX Best Local Similarity 100.0%; Pred. No. 1.5e+02;  
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
XX  
XX 14 TGGGCTGGGAGGGTGGT 32  
XX ||||||||||||||||  
XX 19 TGGGCTGGGAGGGTGGT 1  
XX  
XX  
XX RESULT 224  
XX ADF93554/C  
XX ID ADF93554 standard; RNA; 19 BP.  
XX AC ADF93554;  
XX  
XX 26-FEB-2004 (first entry)  
XX  
XX Human TERC siNA lower strand, SEQ ID 281.  
XX  
XX Cytostatic; vasotropic; protozoacide; immunosuppressive; dermatological;  
XX neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;  
XX antiarthritic; antiinflammatory; gene therapy; telomerase; human; terc;  
XX RNA interference; short interfering nucleic acid; siNA;  
XX short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;  
XX short hairpin RNA; shRNA; expression modulation; gene therapy;  
XX drug screening; diagnosis; therapeutic target identification;  
XX pharmacogenomics; gene function analysis; gene mapping; TERC; TERT; ss.  
XX  
XX Homo sapiens.  
XX  
XX WO2003070742-A1.  
XX  
XX 28-AUG-2003.  
XX  
XX 11-FEB-2003; 2003WO-US004088.  
XX  
XX 20-FEB-2002; 2002US-0358580P.  
XX  
XX 11-MAR-2002; 2002US-0363124P.  
XX

PR 06-JUN-2002; 2002US-0386782P.  
PR 17-JUL-2002; 2002US-0396600P.  
PR 29-AUG-2002; 2002US-0406784P.  
PR 05-SEP-2002; 2002US-0408378P.  
PR 09-SEP-2002; 2002US-0409293P.  
PR 15-JAN-2003; 2003US-0440129P.  
XX (RIBO-) RIBOZYME PHARM INC.  
XX  
XX Mcswiggen J, Beigelman L;  
XX WPI; 2003-689777/65.  
XX  
XX New short interfering nucleic acid downregulates expression of the  
XX telomerase gene useful e.g. for treatment and diagnosis of cancer.  
XX  
XX Example 3; SEQ ID NO 281; 145pp; English.  
XX  
XX The invention relates to short interfering nucleic acids (siNA) which  
XX downregulate expression of the one or more telomerase genes by RNA  
XX interference. The siNAs may or may not comprise ribonucleotides and may  
XX be double or single stranded. They further comprise sense and antisense  
XX regions, or alternatively are assembled from a sense oligonucleotide and  
XX an antisense oligonucleotide. Specifically, the siNAs include short  
XX interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short  
XX hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,  
XX can contain deoxyribonucleotides, and can be chemically synthesised,  
XX expressed from a vector or enzymatically synthesised. The invention also  
XX relates to kits for the in vitro or in vivo delivery of siNA; conjugates  
XX and/or complexes of siNA; and vectors that express siNA. The siNAs are  
XX used to modulate expression of the telomerase genes in cells, tissue  
XX explants or organisms (e.g., by ex vivo gene therapy), or in grafts and  
XX transplants for the treatment of a variety of conditions. They may be  
XX used for treating cancer, restenosis, or autoimmune or age-related diseases,  
XX (e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,  
XX skin ulcers and rheumatoid arthritis. The siNAs are also useful for drug  
XX screening, diagnosis, therapeutic target identification and validation,  
XX genetic engineering, pharmacogenomics, studying gene function, and gene  
XX mapping (e.g., of single nucleotide polymorphisms). The present sequence  
XX represents the lower strand of a human TERC-targeted double-stranded  
XX siNA.  
XX  
XX Sequence 19 BP; 3 A; 5 C; 10 G; 0 T; 1 U; 0 Other;  
XX  
XX  
XX Query Match 4.2%; Score 19; DB 1; Length 19;  
XX Best Local Similarity 100.0%; Pred. No. 1.5e+02;  
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
XX  
XX 194 TTGCGCCCTCCCGGGGACC 212  
XX ||||||||||||||||  
XX 19 TTGCGCCCTCCCGGGGACC 1  
XX  
XX  
XX RESULT 225  
XX ADF93559/C  
XX ID ADF93559 standard; RNA; 19 BP.  
XX AC ADF93559;  
XX  
XX 26-FEB-2004 (first entry)  
XX  
XX Human TERC siNA lower strand, SEQ ID 286.  
XX  
XX Cytostatic; vasotropic; protozoacide; immunosuppressive; dermatological;  
XX neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;  
XX antiarthritic; antiinflammatory; gene therapy; telomerase; human; terc;  
XX RNA interference; short interfering nucleic acid; siNA;  
XX short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;  
XX short hairpin RNA; shRNA; expression modulation; gene therapy;  
XX drug screening; diagnosis; therapeutic target identification;  
XX pharmacogenomics; gene function analysis; gene mapping; TERC; TERT; ss.  
XX

OS Homo sapiens.  
 XX WO2003070742-A1.  
 PN 28-AUG-2003.  
 XX 11-FEB-2003; 2003WO-US004088.  
 XX 20-FEB-2002; 2002US-0358580P.  
 PR 11-MAR-2002; 2002US-03631124P.  
 PR 06-JUN-2002; 2002US-0386782P.  
 PR 17-JUL-2002; 2002US-0396600P.  
 PR 29-AUG-2002; 2002US-0406784P.  
 PR 05-SEP-2002; 2002US-0408378P.  
 PR 09-SEP-2002; 2002US-0409293P.  
 PR 15-JAN-2003; 2003US-0440129P.  
 XX (RIBO-) RIBOZYME PHARM INC.  
 XX Mcswiggen J, Beigelman L;  
 PI WPI; 2003-689777/65.  
 XX New short interfering nucleic acid downregulates expression of the  
 PT telomerase gene useful e.g. for treatment and diagnosis of cancer.  
 XX Example 3; SEQ ID NO 286; 145pp; English.  
 XX The invention relates to short interfering nucleic acids (siNA) which  
 CC downregulate expression of the one or more telomerase genes by RNA  
 CC interference. The siNAs may or may not comprise ribonucleotides and may  
 CC be double or single stranded. They further comprise sense and antisense  
 CC regions, or alternatively are assembled from a sense oligonucleotide and  
 CC an antisense oligonucleotide. Specifically, the siNAs include short  
 CC interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short  
 CC hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,  
 CC can contain deoxyribonucleotides, and can be chemically synthesised,  
 CC expressed from a vector or enzymatically synthesised. The invention also  
 CC relates to kits for the in vitro or in vivo delivery of siNA; conjugates  
 CC and/or complexes of siNA; and vectors that express siNA. The siNAs are  
 CC used to modulate expression of the telomerase genes in cells, tissue  
 CC explants or organisms (e.g., by ex vivo gene therapy), or in grafts and  
 CC transplants for the treatment of a variety of conditions. They may be  
 CC used for treating cancer, restenosis, infectious diseases (specifically  
 CC protozoal), transplant rejection, or autoimmune or age-related diseases,  
 CC e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,  
 CC skin ulcers and rheumatoid arthritis. The siNAs are also useful for drug  
 CC screening, diagnosis, therapeutic target identification and validation,  
 CC genetic engineering, pharmacogenomics, studying gene function, and gene  
 CC mapping (e.g., of single nucleotide polymorphisms). The present sequence  
 CC represents the lower strand of a human TERC-targeted double-stranded  
 CC siNA.  
 XX Sequence 19 BP; 1 A; 3 C; 10 G; 0 T; 5 U; 0 Other;  
 SQ Query Match 4.2%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 1.5e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Oy 284 CACCACCTGCCACCGCGAA 302  
 Db 19 CACCACCTGCCACCGCGAA 1  
 RESULT 226  
 ADO22919  
 ID ADO22919 standard; cDNA; 19 BP.  
 XX AC ADO22919;  
 XX DT 01-JUL-2004 (first entry)  
 XX DE Human telomerase RNA gene, SDO target region #4.

XX Human; ss; SDO; short double stranded oligonucleotide; cleavage site;  
 KW viral infection; malignant tumour; genetic disease; metabolic disease;  
 KW gene chip; protein chip; microarray; gene drug; Dermogene; Lungene;  
 KW Hepatogene; Leukogene; Lymphogene; Proastogene; Breastogene;  
 KW Braintumogene; Skin-whitogene; short interfering RNA; siRNA; cancer;  
 XX RNA interference.  
 XX Homo sapiens.  
 OS US2004072769-A1.  
 PN 15-APR-2004.  
 XX 16-SEP-2002; 2002US-00016490.  
 XX 16-SEP-2002; 2002US-00016490.  
 XX (YINJ/) YIN J Q.  
 PA Yin JQ;  
 PI WPI; 2004-355427/33.  
 XX Designing and selecting short double-stranded oligonucleotides for  
 PT treating viral infections, cancer and genetic or metabolic diseases,  
 PT comprises using gene chip and protein chip microarrays to identify  
 PT specific DNA sequences.  
 XX Claim 12; SEQ ID NO 8; 58pp; English.  
 PS The invention relates to screening, identifying or predicting, and  
 XX assembling 19-25 nt double-stranded oligonucleotides (termed short double  
 CC stranded oligonucleotides, SDO) as active pharmaceutical compositions  
 CC for the treatment of viral infections, malignant tumours, and genetic and  
 CC metabolic diseases, comprising screening and identifying a specific DNA  
 CC sequence in an abnormal gene encoding a protein with gene chip and  
 CC protein chip microarrays. The above method comprises screening the  
 CC disease-causing genes, over-expressing in cells and/or tissues, with the  
 CC gene chip and protein chip microarrays, identifying a specific DNA  
 CC sequence within the abnormal gene encoding a protein or playing other  
 CC biological roles with the assistance of computer and specific software,  
 CC predicting efficacious 19-25 nt double-stranded oligonucleotides with a  
 CC 5'-AU(T)CCG-3' or 5'-U(T)CCG-3' special pattern complementary to at  
 CC least a portion of an RNA molecule and making sure that selected sequence  
 CC is not localised within the stem-loop of target mRNA with any related  
 CC software. Also included are pharmaceutical compositions of gene drugs  
 CC (such as Dermogene, Lungene, Hepatogene, Leukogene, Lymphogene,  
 CC Prostogene, Breastogene, Braintumogene and Skin-whitogene including but  
 CC being not limited to part or all of the following components: single or a  
 CC group of specific 19-25 nt dRNA, 19-25 nt sRNA-cDNA, 19-25 nt dRNA  
 CC and/or single-stranded RNA and/or DNA with the special pattern, 5'-  
 CC CGAT(U)-3' or its derivatives, one or more nucleic acid condensation  
 CC agents (or none), one or more pharmaceutical carriers, one or more  
 CC specific cell-targeting proteins and other active agents and additional  
 CC materials) and a simplified method for predicting and selecting a  
 CC specific and efficacious small double-stranded oligonucleotides (SDSO),  
 CC antisense oligonucleotide molecules or short interfering RNA (siRNA)  
 CC (comprising identifying a special pattern that can be localised in any  
 CC position of an oligonucleotide sequence evaluating the specificity of a  
 CC selected sequence). The Short interfering RNA (siRNA) are targeted  
 CC against genes involved in viral infection, malignant tumours, genetic and  
 CC metabolic diseases. The methods are useful for designing and selecting  
 CC short double-stranded oligonucleotides as a gene drug that can  
 CC specifically inactivate a group of corresponding genes. The composition  
 CC may be used for treating diseases or disorders associated with abnormal  
 CC expression of genes in cells or tissues of humans or animals, such as  
 CC viral infections, cancer, or genetic or metabolic diseases. The present  
 CC sequence is a target region for an SDO from an human cDNA.  
 XX Sequence 19 BP; 6 A; 4 C; 8 G; 1 T; 0 U; 0 Other;  
 SQ Query Match 4.2%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 1.5e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 372 AGAGGAACGGAGCGAGTCC 390  
|||||  
Db 1 AGAGGAACGGAGCGAGTCC 19

RESULT 227  
ADO23063  
ID ADO23063 standard; cDNA; 19 BP.  
XX AC ADO23063;  
XX  
XX 01-JUL-2004 (first entry)  
XX  
XX Human telomerase RNA gene, SDO target region #3.  
DE  
XX Human; ss; SDO; short double stranded oligonucleotide; cleavage site;  
KW viral infection; malignant tumour; genetic disease; metabolic disease;  
KW gene chip; protein chip; microarray; gene drug; Dermogene; Lungene;  
KW Hepatogene; Leukogene; Lymphogene; Prostagene; Breastogene;  
KW Braintumogene; Skin-whitogene; short interfering RNA; siRNA; cancer;  
KW RNA interference.  
XX  
XX Homo sapiens.  
XX  
XX US2004072769-A1.  
XX  
XX 15-APR-2004.  
XX  
XX 16-SEP-2002; 2002US-00016490.  
XX  
XX 16-SEP-2002; 2002US-00016490.  
XX  
XX (YINJ/) YIN J Q.  
XX Yin JQ;  
XX WPI; 2004-355427/33.  
XX  
XX Designing and selecting short double-stranded oligonucleotides for  
PT treating viral infections, cancer and genetic or metabolic diseases,  
PT comprises using gene chip and protein chip microarrays to identify  
PT specific DNA sequences.  
XX  
XX Example 1; Page 19; 58pp; English.

XX The invention relates to screening, identifying or predicting, and  
CC assembling 19-25 nt double-stranded oligonucleotides (termed short double  
CC stranded oligonucleotides, SDO) as active pharmaceutical compositions  
CC for the treatment of viral infections, malignant tumours, and genetic and  
CC metabolic diseases, comprising screening and identifying a specific DNA  
CC sequence in an abnormal gene encoding a protein with gene chip and  
CC protein chip microarrays. The above method comprises screening the  
CC disease-causing genes, over-expressing in cells and/or tissues, with the

Best Local Similarity 4.2%; Score 19; DB 1; Length 19;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 424 GTGCACCCAGGACTCGGCT 442  
|||||  
Db 1 GTGCACCCAGGACTCGGCT 19

RESULT 228  
ADO23064  
ID ADO23064 standard; cDNA; 19 BP.  
XX AC ADO23064;  
XX  
XX 01-JUL-2004 (first entry)  
XX  
XX Human telomerase RNA gene, SDO target region #5.  
DE  
XX Human; ss; SDO; short double stranded oligonucleotide; cleavage site;  
KW viral infection; malignant tumour; genetic disease; metabolic disease;  
KW gene chip; protein chip; microarray; gene drug; Dermogene; Lungene;  
KW Hepatogene; Leukogene; Lymphogene; Prostagene; Breastogene;  
KW Braintumogene; Skin-whitogene; short interfering RNA; siRNA; cancer;  
KW RNA interference.  
XX  
XX Homo sapiens.  
XX  
XX US2004072769-A1.  
XX  
XX 15-APR-2004.  
XX  
XX 16-SEP-2002; 2002US-00016490.  
XX  
XX 16-SEP-2002; 2002US-00016490.  
XX  
XX (YINJ/) YIN J Q.  
XX Yin JQ;  
XX WPI; 2004-355427/33.  
XX  
XX Designing and selecting short double-stranded oligonucleotides for  
PT treating viral infections, cancer and genetic or metabolic diseases,  
PT comprises using gene chip and protein chip microarrays to identify  
PT specific DNA sequences.  
XX  
XX Example 1; Page 19; 58pp; English.

XX The invention relates to screening, identifying or predicting, and  
CC assembling 19-25 nt double-stranded oligonucleotides (termed short double  
CC stranded oligonucleotides, SDO) as active pharmaceutical compositions  
CC for the treatment of viral infections, malignant tumours, and genetic and  
CC metabolic diseases, comprising screening and identifying a specific DNA  
CC sequence in an abnormal gene encoding a protein with gene chip and  
CC protein chip microarrays. The above method comprises screening the  
CC disease-causing genes, over-expressing in cells and/or tissues, with the

Query Match 4.2%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 1.5e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 424 GTGCACCCAGGACTCGGCT 442  
|||||  
Db 1 GTGCACCCAGGACTCGGCT 19

RESULT 228  
ADO23064  
ID ADO23064 standard; cDNA; 19 BP.  
XX AC ADO23064;  
XX  
XX 01-JUL-2004 (first entry)  
XX  
XX Human telomerase RNA gene, SDO target region #5.  
DE  
XX Human; ss; SDO; short double stranded oligonucleotide; cleavage site;  
KW viral infection; malignant tumour; genetic disease; metabolic disease;  
KW gene chip; protein chip; microarray; gene drug; Dermogene; Lungene;  
KW Hepatogene; Leukogene; Lymphogene; Prostagene; Breastogene;  
KW Braintumogene; Skin-whitogene; short interfering RNA; siRNA; cancer;  
KW RNA interference.  
XX  
XX Homo sapiens.  
XX  
XX US2004072769-A1.  
XX  
XX 15-APR-2004.  
XX  
XX 16-SEP-2002; 2002US-00016490.  
XX  
XX 16-SEP-2002; 2002US-00016490.  
XX  
XX (YINJ/) YIN J Q.  
XX Yin JQ;  
XX WPI; 2004-355427/33.  
XX  
XX Designing and selecting short double-stranded oligonucleotides for  
PT treating viral infections, cancer and genetic or metabolic diseases,  
PT comprises using gene chip and protein chip microarrays to identify  
PT specific DNA sequences.  
XX  
XX Example 1; Page 19; 58pp; English.

XX The invention relates to screening, identifying or predicting, and  
CC assembling 19-25 nt double-stranded oligonucleotides (termed short double  
CC stranded oligonucleotides, SDO) as active pharmaceutical compositions  
CC for the treatment of viral infections, malignant tumours, and genetic and  
CC metabolic diseases, comprising screening and identifying a specific DNA  
CC sequence in an abnormal gene encoding a protein with gene chip and  
CC protein chip microarrays. The above method comprises screening the  
CC disease-causing genes, over-expressing in cells and/or tissues, with the

CC gene chip and protein chip microarrays, identifying a specific DNA  
 CC sequence within the abnormal gene encoding a protein or playing other  
 CC biological roles with the assistance of computer and specific software,  
 CC predicting efficacious 19-25 nt double-stranded oligonucleotides with a  
 CC 5'-AU(T)CCG-3' or 5'-U(T)CCG-3' special pattern complementary to at  
 CC least a portion of an RNA molecule and making sure that selected sequence  
 CC is not localised within the stem-loop of target mRNA with any related  
 CC software. Also included are pharmaceutical compositions of gene drugs  
 CC (such as Dermogene, Lungene, Hepatogene, Leukogene, Lymphogene,  
 CC Prostogene, Breastogene, Braintumogene and Skin-whitogene including but  
 CC being not limited to part or all of the following components: single or a  
 CC group of specific 19-25 nt dsRNA, 19-25 nt srRNA-cDNA, 19-25 nt dsRNA  
 CC and/or single-stranded RNA and/or DNA with the special pattern, 5'-  
 CC CGAT(U)-3' or its derivatives, one or more nucleic acid condensation  
 CC agents (or none), one or more pharmaceutical carriers, one or more  
 CC specific cell-targeting proteins and other active agents and additional  
 CC materials) and a simplified method for predicting and selecting a  
 CC specific and efficacious small double-stranded oligonucleotides (SDSO),  
 CC antisense oligonucleotide molecules or short interfering RNA (siRNA)  
 CC (comprising identifying a special pattern that can be localised in any  
 CC position of an oligonucleotide sequence evaluating the specificity of a  
 CC selected sequence). The Short interfering RNA (siRNA) are targeted  
 CC against genes involved in viral infection, malignant tumours, genetic and  
 CC metabolic diseases. The methods are useful for designing and selecting  
 CC short double-stranded oligonucleotides as a gene drug that can  
 CC specifically inactivate a group of corresponding genes. The composition  
 CC may be used for treating diseases or disorders associated with abnormal  
 CC expression of genes in cells or tissues of humans or animals, such as  
 CC viral infections, cancer, or genetic or metabolic diseases. The present  
 CC sequence is a target region for an SDSO from an human cDNA.

XX SQ Sequence 19 BP; 1 A; 2 C; 12 G; 4 T; 0 U; 0 Other;

Query Match 4.2%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 1.5e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 14 TGGGCTGGGAGGGTGT 32

Db 1 TGGGCTGGGAGGGTGT 19

RESULT 229

ADO23062

ID ADO23062 standard; cDNA; 19 BP.

XX AC ADO23062;

XX DT 01-JUL-2004 (first entry)

XX DE Human telomerase RNA gene, SDSO target region #2.

XX KW Human; ss; SDSO; short double stranded oligonucleotide; cleavage site;  
 KW viral infection; malignant tumour; genetic disease; metabolic disease;  
 KW gene chip; protein chip; microarray; gene drug; Dermogene; Lungene;  
 KW Hepatogene; Leukogene; Lymphogene; Prostogene; Breastogene;  
 KW Braintumogene; Skin-whitogene; short interfering RNA; siRNA; cancer;  
 KW RNA interference.

XX OS Homo sapiens.

XX US US2004072769-A1.

XX PD 15-APR-2004.

XX PF 16-SEP-2002; 2002US-00016490.

XX PR 16-SEP-2002; 2002US-00016490.

XX PA (YINJ/) YIN J Q.

XX YIN JQ;

XX

DR WPI; 2004-355427/33.

XX PT Designing and selecting short double-stranded oligonucleotides for  
 PT treating viral infections, cancer and genetic or metabolic diseases,  
 PT comprises using gene chip and protein chip microarrays to identify  
 PT specific DNA sequences.

XX PS Example 1; Page 19; 58pp; English.

XX CC The invention relates to screening, identifying or predicting, and  
 CC assembling 19-25 nt double-stranded oligonucleotides (termed short double  
 CC stranded oligonucleotides, SDSO) as active pharmaceutical compositions  
 CC for the treatment of viral infections, malignant tumours, and genetic and  
 CC metabolic diseases, comprising screening and identifying a specific DNA  
 CC sequence in an abnormal gene encoding a protein with gene chip and  
 CC protein chip microarrays. The above method comprises screening the  
 CC disease-causing genes, over-expressing in cells and/or tissues, with the  
 CC gene chip and protein chip microarrays, identifying a specific DNA  
 CC sequence within the abnormal gene encoding a protein or playing other  
 CC biological roles with the assistance of computer and specific software,  
 CC predicting efficacious 19-25 nt double-stranded oligonucleotides with a  
 CC 5'-AU(T)CCG-3' or 5'-U(T)CCG-3' special pattern complementary to at  
 CC least a portion of an RNA molecule and making sure that selected sequence  
 CC is not localised within the stem-loop of target mRNA with any related  
 CC software. Also included are pharmaceutical compositions of gene drugs  
 CC (such as Dermogene, Lungene, Hepatogene, Leukogene, Lymphogene,  
 CC Prostogene, Breastogene, Braintumogene and Skin-whitogene including but  
 CC being not limited to part or all of the following components: single or a  
 CC group of specific 19-25 nt dsRNA, 19-25 nt srRNA-cDNA, 19-25 nt dsRNA  
 CC and/or single-stranded RNA and/or DNA with the special pattern, 5'-  
 CC CGAT(U)-3' or its derivatives, one or more nucleic acid condensation  
 CC agents (or none), one or more pharmaceutical carriers, one or more  
 CC specific cell-targeting proteins and other active agents and additional  
 CC materials) and a simplified method for predicting and selecting a  
 CC specific and efficacious small double-stranded oligonucleotides (SDSO),  
 CC antisense oligonucleotide molecules or short interfering RNA (siRNA)  
 CC (comprising identifying a special pattern that can be localised in any  
 CC position of an oligonucleotide sequence evaluating the specificity of a  
 CC selected sequence). The Short interfering RNA (siRNA) are targeted  
 CC against genes involved in viral infection, malignant tumours, genetic and  
 CC metabolic diseases. The methods are useful for designing and selecting  
 CC short double-stranded oligonucleotides as a gene drug that can  
 CC specifically inactivate a group of corresponding genes. The composition  
 CC may be used for treating diseases or disorders associated with abnormal  
 CC expression of genes in cells or tissues of humans or animals, such as  
 CC viral infections, cancer, or genetic or metabolic diseases. The present  
 CC sequence is a target region for an SDSO from an human cDNA.

XX SQ Sequence 19 BP; 5 A; 6 C; 7 G; 1 T; 0 U; 0 Other;

Query Match 4.2%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 1.5e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 116 CAGCGGGCGGAAAAGCCTC 134

Db 1 CAGCGGGCGGAAAAGCCTC 19

RESULT 230

ADO23065

ID ADO23065 standard; cDNA; 19 BP.

XX AC ADO23065;

XX DT 01-JUL-2004 (first entry)

XX DE Human telomerase RNA gene, SDSO target region #6.

XX KW Human; ss; SDSO; short double stranded oligonucleotide; cleavage site;  
 KW viral infection; malignant tumour; genetic disease; metabolic disease;  
 KW gene chip; protein chip; microarray; gene drug; Dermogene; Lungene;  
 KW Hepatogene; Leukogene; Lymphogene; Prostogene; Breastogene;

KW Brantumogene; Skin-whitogene; short interfering RNA; siRNA; cancer;  
KW RNA interference.  
XX Homo sapiens.  
XX US2004072769-A1.  
XX 15-APR-2004.  
XX 16-SEP-2002; 2002US-00016490.  
XX 16-SEP-2002; 2002US-00016490.  
XX (YINJ/) YIN J Q.  
XX Yin JQ;  
XX WPI; 2004-355427/33.  
XX Designing and selecting short double-stranded oligonucleotides for  
PT treating viral infections, cancer and genetic or metabolic diseases,  
PT comprises using gene chip and protein chip microarrays to identify  
PT specific DNA sequences.  
XX Example 1; Page 19; 58pp; English.  
XX The invention relates to screening, identifying or predicting, and  
CC assembling 19-25 nt double-stranded oligonucleotides (termed short double  
CC stranded oligonucleotides, SDO) as active pharmaceutical compositions  
CC for the treatment of viral infections, malignant tumours, and genetic and  
CC metabolic diseases, comprising screening and identifying a specific DNA  
CC sequence in an abnormal gene encoding a protein with gene chip and  
CC protein chip microarrays. The above method comprises screening the  
CC disease-causing genes, over-expressing in cells and/or tissues, with the  
CC gene chip and protein chip microarrays, identifying a specific DNA  
CC sequence within the abnormal gene encoding a protein or playing other  
CC biological roles with the assistance of computer and specific software,  
CC predicting efficacious 19-25 nt double-stranded oligonucleotides with a  
CC 5'-AU(T)CCG-3' or 5'-U(T)CCG-3' special pattern complementary to at  
CC least a portion of an RNA molecule and making sure that selected sequence  
CC is not localised within the stem-loop of target mRNA with any related  
CC software. Also included are pharmaceutical compositions of gene drugs  
CC (such as Dermogene, Lungene, Hepatogene, Leukogene, Lymphogene,  
CC Prostagene, Breastogene, Brantumogene and Skin-whitogene including but  
CC being not limited to part or all of the following components: single or a  
CC group of specific 19-25 nt dsRNA, 19-25 nt srNA-cDNA, 19-25 nt dsRNA  
CC and/or single-stranded RNA and/or DNA with the special pattern, 5'-  
CC CGAT(U)-3' or its derivatives, one or more nucleic acid condensation  
CC agents (or none), one or more pharmaceutical carriers, one or more  
CC specific cell-targeting proteins and other active agents and additional  
CC materials) and a simplified method for predicting and selecting a  
CC specific and efficacious small double-stranded oligonucleotides (SDSO),  
CC antisense oligonucleotide molecules or short interfering RNA (siRNA)  
CC (comprising identifying a special pattern that can be localised in any  
CC position of an oligonucleotide sequence evaluating the specificity of a  
CC selected sequence). The Short interfering RNA (siRNA) are targeted  
CC against genes involved in viral infection, malignant tumours, genetic and  
CC metabolic diseases. The methods are useful for designing and selecting  
CC short double-stranded oligonucleotides as a gene drug that can  
CC specifically inactivate a group of corresponding genes. The composition  
CC may be used for treating diseases or disorders associated with abnormal  
CC expression of genes in cells or tissues of humans or animals, such as  
CC viral infections, cancer, or genetic or metabolic diseases. The present  
CC sequence is a target region for an SDO from an human cDNA.  
XX Sequence 19 BP; 3 A; 13 C; 3 G; 0 T; 0 U; 0 Other;

Query Match 4.2%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 1.5e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 230 CCAGCCCCCGAACCCCGCC 248  
|||||

Db 1 CCAGCCCCCGAACCCCGCC 19

RESULT 231  
ADP27906  
ID ADP27906 standard; DNA; 19 BP.  
XX ADP27906;  
AC ADP27906;  
XX 26-AUG-2004 (first entry)

XX PCR primer to amplify a human cancer prognostic marker DNA SeqID 343.  
DE human; primer; PCR; prognostic marker; EGFR;  
XX epidermal growth factor receptor; cancer; gene expression profiling;  
KW microarray; head and neck cancer; colon cancer; metastatic spread;  
KW neoplastic disease; ss.  
XX Homo sapiens.  
OS WO2004046386-A1.  
PN 03-JUN-2004.  
XX 14-NOV-2003; 2003WO-US036777.  
PF 15-NOV-2002; 2002US-0427090P.  
PR (GENO-) GENOMIC HEALTH INC.  
XX (VALL-) VALL HEBRON UNIV HOSPITAL.  
XX Baker JB, Cronin MT, Shak S, Baselga J;  
PI WPI; 2004-420643/39.  
DR Prognosing a patient with EGFR-expressing colon cancer comprises  
XX subjecting a sample comprising EGFR-expressing cancer cells to  
PT quantitative analysis of the expression level of the RNA transcript of at  
PT least one gene e.g., CD44v3.  
XX Claim 54; SEQ ID NO 343; 113pp; English.

XX This invention relates to a novel method concerning prognostic markers  
CC associated with EGFR (epidermal growth factor receptor) positive cancer.  
CC Specifically, it refers to a gene expression profiling method that can  
CC provide a prediction as to whether a patient is likely to respond well to  
CC treatment with an EGFR inhibitor. The present invention describes the  
CC quantitative analysis of the expression level of the RNA transcript of at  
CC least one gene selected from the group of CD44v3, CD44v6, DR5, GR01,  
CC KRT17, LAMC2 or their products thereof. It further provides a cDNA  
CC microarray containing named genes that represent prognostic transcripts  
CC which are useful for determining whether a patient diagnosed with an EGFR  
CC -expressing head or neck cancer or colon cancer exhibits elevated or  
CC decreased expression levels of these genes compared to normal. As such,  
CC these methods are also useful for prognosing or predicting the likelihood  
CC of cancer-attributable death or progression, including recurrence and  
CC metastatic spread of a neoplastic disease, as well as drug resistance.  
CC This oligonucleotide sequence is a PCR primer used to amplify a human PCR  
CC amplicon DNA sequence used as a prognostic cancer marker, given in an  
CC exemplification of the invention.  
XX Sequence 19 BP; 7 A; 3 C; 8 G; 1 T; 0 U; 0 Other;

Query Match 4.2%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 1.5e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 371 AAGAGGACGGACCGAGTC 389  
|||||  
Db 1 AAGAGGACGGACCGAGTC 19

RESULT 232



XX 2',5'-oligoadenylic acid analog related oligonucleotide #6.  
DE Cytostatic; virucide; 2'; 5'-oligoadenylic acid analog; antitumour;  
KW antiviral; cancer; ss.  
KW Synthetic.  
OS  
XX  
XX  
XX Key Location/Qualifiers  
FH modified\_base 1..19  
FT /\*tag= d  
FT /mod\_base= OTHER  
FT /note= "phosphorothioate backbone"  
FT modified\_base 1..5  
FT /\*tag= a  
FT /mod\_base= OTHER  
FT /note= "2',4'-oxyethylene linkage in the sugar residues"  
FT modified\_base 15..19  
FT /\*tag= c  
FT /mod\_base= OTHER  
FT /note= "2',4'-oxyethylene linkage in the sugar residues"  
FT modified\_base 19  
FT /\*tag= b  
FT /mod\_base= OTHER  
FT /note= "C-hydroxyethyl phosphate"  
XX  
XX WO2004046161-A1.  
PN  
XX  
XX 03-JUN-2004.  
XX  
XX 19-NOV-2003; 2003WO-JP014748.  
XX  
XX 19-NOV-2002; 2002JP-00334731.  
XX  
XX (SANY ) SANKYO CO LTD.  
XX  
XX Koizumi M, Morita K;  
XX WPI; 2004-460494/43.  
XX  
XX Stable 2',5'-oligoadenylic acid analogs containing natural and modified  
PT nucleic acid units as well as unusual phosphate groups with excellent  
PT activity particularly antitumor, applicable in cancer or antiviral  
PT therapy.  
XX  
XX Disclosure; Page 100-101; 220pp; Japanese.  
XX  
XX The present invention relates to novel 2',5'-oligoadenylic acid analogs  
CC and their pharmacologically- acceptable salts. The analogs are stable  
CC with superior antitumour and antiviral activity and so are useful in  
CC cancer or antiviral therapy e.g. as antisense drugs. The present sequence  
CC was used to illustrate the invention.  
XX  
XX Sequence 19 BP; 6 A; 5 C; 8 G; 0 T; 0 U; 0 Other;  
SQ  
Query Match 4.2%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 1.5e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 76 GTGCTTTTGTCTCCCGCGC 94  
DB 19 GTGCTTTTGTCTCCCGCGC 1  
RESULT 235  
ADP87880/c  
ID ADP87880 standard; DNA; 19 BP.  
XX  
XX ADP87880;  
XX  
XX 26-AUG-2004 (first entry)  
DT  
XX 2',5'-oligoadenylic acid analog related oligonucleotide #7.  
DE

XX Cytostatic; virucide; 2'; 5'-oligoadenylic acid analog; antitumour;  
KW antiviral; cancer; ss.  
XX Synthetic.  
OS  
XX  
XX Key Location/Qualifiers  
FH modified\_base 1..19  
FT /\*tag= d  
FT /mod\_base= OTHER  
FT /note= "phosphorothioate backbone"  
FT modified\_base 1..5  
FT /\*tag= a  
FT /mod\_base= OTHER  
FT /note= "2',4'-oxyethylene linkage in the sugar residues"  
FT modified\_base 15..19  
FT /\*tag= c  
FT /mod\_base= OTHER  
FT /note= "2',4'-oxyethylene linkage in the sugar residues"  
FT modified\_base 19  
FT /\*tag= b  
FT /mod\_base= OTHER  
FT /note= "C-hydroxyethyl phosphate"  
XX  
XX WO2004046161-A1.  
PN  
XX  
XX 03-JUN-2004.  
XX  
XX 19-NOV-2003; 2003WO-JP014748.  
XX  
XX 19-NOV-2002; 2002JP-00334731.  
XX  
XX (SANY ) SANKYO CO LTD.  
XX  
XX Koizumi M, Morita K;  
XX WPI; 2004-460494/43.  
XX  
XX Stable 2',5'-oligoadenylic acid analogs containing natural and modified  
PT nucleic acid units as well as unusual phosphate groups with excellent  
PT activity particularly antitumor, applicable in cancer or antiviral  
PT therapy.  
XX  
XX Disclosure; Page 101; 220pp; Japanese.  
XX  
XX The present invention relates to novel 2',5'-oligoadenylic acid analogs  
CC and their pharmacologically- acceptable salts. The analogs are stable  
CC with superior antitumour and antiviral activity and so are useful in  
CC cancer or antiviral therapy e.g. as antisense drugs. The present sequence  
CC was used to illustrate the invention.  
XX  
XX Sequence 19 BP; 6 A; 5 C; 8 G; 0 T; 0 U; 0 Other;  
SQ  
Query Match 4.2%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 1.5e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 76 GTGCTTTTGTCTCCCGCGC 94  
DB 19 GTGCTTTTGTCTCCCGCGC 1  
RESULT 236  
ADP87874/c  
ID ADP87874 standard; DNA; 19 BP.  
XX  
XX ADP87874;  
XX  
XX 26-AUG-2004 (first entry)  
DT  
XX 2',5'-oligoadenylic acid analog related oligonucleotide #1.  
DE  
XX Cytostatic; virucide; antitumour; antiviral; cancer; ss.  
KW



```

XX OS Synthetic.
XX FH Key Location/Qualifiers
XX FT modified_base 1..19
XX FT /*tag= a
XX FT /mod_base= OTHER
XX FT /note= "2',4'-oxyethylene linkage in the sugar residues"
XX FT modified_base 19
XX FT /*tag= b
XX FT /mod_base= OTHER
XX FT /note= "C-hydroxyethyl phosphate"
XX WO2004046161-A1.
XX 03-JUN-2004.
XX 19-NOV-2003; 2003WO-JP014748.
XX 19-NOV-2002; 2002JP-00334731.
XX (SANY ) SANKYO CO LTD.
XX Koizumi M, Morita K;
XX WPI; 2004-460494/43.
XX Stable 2',5'-oligoadenylic acid analogs containing natural and modified
XX nucleic acid units as well as unusual phosphate groups with excellent
XX activity particularly antitumor, applicable in cancer or antiviral
XX therapy.
XX Disclosure; Page 100; 220pp; Japanese.
XX The present invention relates to novel 2',5'-oligoadenylic acid analogs
XX and their pharmacologically- acceptable salts. The analogs are stable
XX with superior antitumor and antiviral activity and so are useful in
XX cancer or antiviral therapy e.g. as antisense drugs. The present sequence
XX was used to illustrate the invention.
XX Sequence 19 BP; 6 A; 5 C; 8 G; 0 T; 0 U; 0 Other;
XX
XX Query Match 4.2%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 1.5e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 76 GTGCTTTTGTCTCCCGCGC 94
XX 19 GTGCTTTTGTCTCCCGCGC 1
XX
XX RESULT 237
XX AAV68470/C
XX ID AAV68470 standard; DNA; 20 BP.
XX AC AAV68470;
XX XX
XX DT 22-MAR-1999 (first entry)
XX XX
XX DE Oligo contained activator-antisense complex spA12-anti-hTR.
XX KW Human; telomerase; hTR; activator-antisense complex; malignant; enzyme;
XX cleave; brain; tumour malignant glioma; breast tumour; renal cell cancer;
XX melanoma; prostate cancer; leukemia; polychemia vera; myeloma; sarcoma;
XX Hodgkin's lymphoma; Waldenstrom's macroglobulinemia; heavy chain disease;
XX carcinoma; chemotherapeutic; antisense; ss.
XX OS Synthetic.
XX OS Homo sapiens.
XX FH Key Location/Qualifiers
XX FT modified_base 1
XX FT /*tag= a

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---

```

FT misc_feature /note= "Sp5'A(2'p5'A)11-Bu2"
FT 19..20
FT /*tag= b
FT /note= "3'-3' internucleotide linkage"
FT 20
FT /*tag= c
FT /note= "nucleotide in reverse orientation 3'-5'"
XX WO9847911-A1.
XX 29-OCT-1998.
XX 13-APR-1998; 98WO-US007397.
XX 21-APR-1997; 97US-0044507P.
XX 03-FEB-1998; 98US-00018125.
XX (CLEV-) CLEVELAND CLINIC FOUND.
XX (USSH ) US NAT INST OF HEALTH.
XX Silverman RH, Kondo S, Cowell JK, Li G, Torrence PF;
XX WPI; 1998-609972/51.
XX New RNase L activator-telomerase antisense complex - useful to inhibit
XX telomerase activity in telomerase-expressing malignancies.
XX Example; Page 53; 81pp; English.
XX This represents an antisense oligonucleotide to the RNA component of
XX human telomerase (hTR) comprised in the. The invention relates to an
XX activator-antisense complex that comprises: (a) an antisense oligo,
XX complementary to a 12-25 nucleotide portion of the RNA component of hTR,
XX with a hydroxyl moiety at the first end; and (b) a linker attached to the
XX first end, and (c) an activator of RNase L attached to the linker. The
XX activator-antisense complex may be used for inhibiting the growth of a
XX telomerase-expressing malignant cell or tumour. The complex is used to
XX specifically cleave the ribonucleotide portion of a telomerase enzyme.
XX The complex inhibits growth of telomerase expressing malignant cells from
XX brain tumour malignant glioma, breast tumour, renal cell cancer,
XX melanoma, and prostate cancer. Many other malignancies and related
XX disorders, may be treated including various acute and chronic leukemias,
XX polychemia vera, Hodgkin's and non-Hodgkin's lymphomas, multiple
XX myeloma, Waldenstrom's macroglobulinemia, heavy chain disease, and solid
XX tumours, including numerous sarcomas and carcinomas. The complex is
XX preferably administered in combination with a chemotherapeutic agent,
XX particularly either cisplatin, doxorubicin, mitomycin, daunorubicin,
XX bleomycin, actinomycin D, or neocarzinostatin. The present sequence is an
XX example of a modified antisense oligo comprised in an activator-antisense
XX complex spA12-anti-hTR
XX
XX SQ Sequence 20 BP; 6 A; 5 C; 8 G; 1 T; 0 U; 0 Other;
XX
XX Query Match 4.2%; Score 19; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 1.6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 76 GTGCTTTTGTCTCCCGCGC 94
XX 19 GTGCTTTTGTCTCCCGCGC 1
XX
XX Db
XX
XX RESULT 238
XX AAV68468/C
XX ID AAV68468 standard; DNA; 20 BP.
XX XX
XX AC AAV68468;
XX XX
XX DT 22-MAR-1999 (first entry)
XX XX
XX DE Oligo contained activator-antisense complex spA4-anti-hTR.
XX XX
XX KW Human; telomerase; hTR; activator-antisense complex; malignant; enzyme;

```

KW	cleave; brain; tumour malignant glioma; breast tumour; renal cell cancer;
KW	melanoma; prostate cancer; leukemia; polychthemia vera; myeloma; sarcoma;
KW	Hodgkin's lymphoma; Waldenstrom's macroglobulinemia; heavy chain disease;
KW	carcinoma; Chemotherapeutic; antisense; ss.
XX	
OS	Synthetic.
OS	Homo sapiens.
XX	
FH	Key
FT	Location/Qualifiers
FT	misc_feature 1..19 b
FT	/tag= b
FT	/note= "antisense oligo sequence claimed in claim 4"
FT	modified_base 1
FT	/tag= a
FT	/note= "Sp5'A(2'p5'A)3-Bu2"
FT	misc_feature 19..20 c
FT	/tag= c
FT	/note= "3'-3' internucleotide linkage"
FT	misc_feature 20
FT	/tag= d
FT	/note= "nucleotide in reverse orientation 3'-5'"
XX	
XX	WO9847911-A1.
PN	
XX	29-OCT-1998.
XX	
XX	13-APR-1998; 98WO-US007397.
PF	
XX	21-APR-1997; 97US-0044507P.
PR	03-FEB-1998; 98US-00018125.
PR	
XX	
PA	(CLEV-) CLEVELAND CLINIC FOUND.
PA	(USSH ) US NAT INST OF HEALTH.
XX	
PI	Silverman RH, Kondo S, Cowell JK, Li G, Torrence PF;
XX	
DR	WPI; 1998-609972/51.
XX	
XX	New RNase L activator-telomerase antisense complex - useful to inhibit
PT	telomerase activity in telomerase-expressing malignancies.
PT	
XX	
PS	Claim 4; Page 45; 8lpp; English.
XX	
CC	This represents an antisense oligonucleotide to the RNA component of
CC	human telomerase (hTR) comprised in the. The invention relates to an
CC	activator-antisense complex that comprises: (a) an antisense oligo,
CC	complementary to a 12-25 nucleotide portion of the RNA component of hTR,
CC	with a hydroxyl moiety at the first end; and (b) a linker attached to the
CC	first end, and (c) an activator of RNase L attached to the linker. The
CC	activator-antisense complex may be used for inhibiting the growth of a
CC	telomerase-expressing malignant cell or tumour. The complex is used to
CC	specifically cleave the ribonucleotide portion of a telomerase enzyme.
CC	The complex inhibits growth of telomerase expressing malignant cells from
CC	brain tumour malignant glioma, breast tumour, renal cell cancer,
CC	melanoma, and prostate cancer. Many other malignancies and related
CC	disorders, may be treated including various acute and chronic leukemias,
CC	polychthemia vera, Hodgkin's and non-Hodgkin's lymphomas, multiple
CC	myeloma, Waldenstrom's macroglobulinemia, heavy chain disease, and solid
CC	tumours, including numerous sarcomas and carcinomas. The complex is
CC	preferably administered in combination with a chemotherapeutic agent,
CC	particularly either cisplatin, doxorubicin, mitomycin, daunorubicin,
CC	bleomycin, actinomycin D, or neocarzinostatin. The present sequence is an
CC	example of a modified antisense oligo comprised in an activator-antisense
CC	complex spA4-anti-hTR
XX	
SQ	Sequence 20 BP; 6 A; 5 C; 8 G; 1 T; 0 U; 0 Other;
	Query Match 4.2%; Score 19; DB 1; Length 20;
	Best Local Similarity 100.0%; Pred. No. 1.6e+02;
	Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY	76 GTGCTTTTGTCTCCCGCGC 94

Db	19 GTGCTTTTGTCTCCCGCGC 1
RESULT 239	
ACC57540	
ID	ACC57540 standard; DNA; 21 BP.
XX	
AC	ACC57540;
XX	
DT	28-JUL-2003 (first entry)
XX	
DE	Short interfering RNA hTR#2 siRNA, targets telomerase RNA.
XX	
KW	RNA interference; short interfering RNA; siRNA; telomerase; cancer;
KW	tumour; cytostatic; contraceptive; immunosuppressive; antifertility;
KW	fungicide; antiparasitic; antiinflammatory; human; gene therapy; ds.
XX	
OS	Synthetic.
XX	
FH	Key
FT	Location/Qualifiers
FT	misc_feature 1..19 b
FT	/tag= b
FT	/note= "double-stranded region, specifically referred to
FT	in Claim 11"
FT	misc_feature 1
FT	/tag= a
FT	/label= Sticky_end
FT	/note= "the 3'-end of the complementary strand overhangs
FT	the 5' end of this strand by the sequence 5'-TT-3'"
FT	misc_feature 20..21 c
FT	/tag= c
FT	/label= Sticky_end
XX	
PN	WO2003034985-A2.
XX	
PD	01-MAY-2003.
XX	
PF	16-OCT-2002; 2002WO-US033146.
XX	
XX	22-OCT-2001; 2001US-0345326P.
PR	20-FEB-2002; 2002US-0359196P.
PR	22-MAY-2002; 2002US-0383195P.
XX	
PA	(UYRP ) UNIV ROCHESTER.
XX	
PI	Rowley PT;
XX	
DR	WPI; 2003-403289/38.
XX	
PT	Novel nucleic acid encoding or comprising interfering RNAs which target
PT	telomerase RNA, useful for inhibiting telomerase activity for treating
PT	cancer, infertility and disorders of the immune system.
XX	
PS	Claim 11; Page 13; 52pp; English.
XX	
CC	The present sequence is that of a short interfering RNA, denoted hTR#2
CC	siRNA, a 19 bp sequence centred in the 26 bp loop in the longest single-
CC	stranded region of human telomerase RNA. The siRNA comprises sense and
CC	antisense nucleic acids that are complementary to each other except for 2
CC	thymidine deoxynucleotides at both 3' overhangs. A nucleic acid
CC	comprising the double-stranded region of this siRNA is specifically
CC	claimed. The invention relates to the discovery that double-stranded
CC	interfering RNAs which target telomerase RNA, or mRNA encoding telomerase
CC	reverse transcriptase (hTERT), are capable of inhibiting telomerase
CC	activity. Inhibition of telomerase in cancer cells leads to telomere
CC	shortening, end-to-end chromosomal fusion, and apoptosis. Interference of
CC	telomerase activity can also be used for treatment of infertility, for
CC	contraception or sterilisation, for immunosuppression, for treatment of
CC	yeast, parasite and fungal infections, and in antiinflammatory therapies.
CC	As telomerase is active in a limited number of cell types, e.g. tumour
CC	cells, germline cells, certain stem cells of the haematopoietic system, T
CC	and B cells, sun-damaged skin, and proliferative cervix, most normal
CC	cells are not affected by telomerase RNA interference therapy

```
XX SQ Sequence 21 BP; 2 A; 8 C; 6 G; 5 T; 0 U; 0 Other;
Query Match 4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1.7e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 270 GGCTTCTCCGAGGACCC 288
|||||
Db 1 GGCTTCTCCGAGGACCC 19

RESULT 240
ACCS7539
ID ACCS7539 standard; DNA; 21 BP.
XX AC
XX ACCS7539;
XX
DT 28-JUL-2003 (first entry)
XX
DE Short interfering RNA hTR#1 siRNA, targets telomerase RNA.
XX
KW RNA interference; short interfering RNA; siRNA; telomerase; cancer;
KW tumour; cytostatic; contraceptive; immunosuppressive; antiinfectivity;
KW fungicide; antiparasitic; antiinflammatory; human; gene therapy;
KW DNA-RNA hybrid; ds.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT misc_feature 1..19
FT /tag= b
FT /note= "double-stranded region, specifically referred to
FT in Claim 10"
FT misc_feature 1
FT /tag= a
FT /label= Sticky_end
FT /note= "the 3' end of the complementary strand overhangs
FT the 5' end of this strand by the sequence 5'-TT-3'"
FT misc_feature 20..21
FT /tag= C
FT /label= Sticky_end
XX
XX WO2003034985-A2.
XX
XX 01-MAY-2003.
XX
XX 16-OCT-2002; 2002WO-US033146.
XX
XX 22-OCT-2001; 2001US-0345326P.
XX
XX 20-FEB-2002; 2002US-0359196P.
XX
XX 22-MAY-2002; 2002US-0383195P.
XX
XX (UYRP ) UNIV ROCHESTER.
XX
XX Rowley PT;
XX
XX WPI; 2003-403289/38.
XX
XX Novel nucleic acid encoding or comprising interfering RNAs which target
XX telomerase RNA, useful for inhibiting telomerase activity for treating
XX cancer, infertility and disorders of the immune system.
XX
XX Claim 10; Page 13; 52pp; English.
XX
XX The present sequence is that of a short interfering RNA, denoted hTR#1
XX siRNA, which targets the template region (see ACCS7538) of human
XX telomerase RNA. The siRNA comprises sense and antisense nucleic acids
XX that are complementary to each other except for 2 thymidine
XX deoxynucleotides at both 3' overhangs. A nucleic acid comprising the
XX double-stranded region of this siRNA is specifically claimed. The
XX invention relates to the discovery that double-stranded interfering RNAs
XX which target telomerase RNA, or mRNA encoding telomerase reverse
```

```
CC transcriptase (TERT), are capable of inhibiting telomerase activity.
CC Inhibition of telomerase in cancer cells leads to telomere shortening,
CC end-to-end chromosomal fusion, and apoptosis. Interference of telomerase
CC activity can also be used for treatment of infertility, for contraception
CC or sterilisation, for immunosuppression, for treatment of yeast, parasite
CC and fungal infections, and in antiinflammatory therapies. As telomerase
CC is active in a limited number of cell types, e.g. tumour cells, germline
CC cells, certain stem cells of the haematopoietic system, T and B cells,
CC sun-damaged skin, and proliferative cervix, most normal cells are not
CC affected by telomerase RNA interference therapy
XX
XX SQ Sequence 21 BP; 5 A; 5 C; 3 G; 2 T; 6 U; 0 Other;
Query Match 4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 68.4%; Pred. No. 1.7e+02;
Matches 13; Conservative 6; Mismatches 0; Indels 0; Gaps 0;

Qy 42 TTGCTTAACCCCTAAGCTGAG 60
:::|||||:|||||
Db 1 UUGUCUAAACCCUACUGAG 19

RESULT 241
ADF93815/C
ID ADF93815 standard; RNA; 21 BP.
XX AC
XX ADF93815;
XX
DT 26-FEB-2004 (first entry)
XX
DE Human TERC chemically modified siRNA, SEQ ID 542.
XX
KW Cytostatic; vasotropic; protozoacide; immunosuppressive; dermatological;
KW neuroprotective; anti-HIV; ophthalmological; antitumor; antirheumatic;
KW antiarthritic; antiinflammatory; gene therapy; telomerase; human; terc;
KW RNA interference; short interfering nucleic acid; siRNA;
KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;
KW short hairpin RNA; shRNA; expression modulation; gene therapy;
KW drug screening; diagnosis; therapeutic target identification;
KW pharmacogenomics; gene function analysis; gene mapping; TERC; TERC;
KW DNA-RNA hybrid; ss.
XX
XX Synthetic.
XX
XX Homo sapiens.
XX
XX Key Location/Qualifiers
FT modified_base 20..21
FT /tag= a
FT /mod_base= OTHER
FT /note= "Ribothymidines"
XX
XX WO2003070742-A1.
XX
XX 28-AUG-2003.
XX
XX 11-FEB-2003; 2003WO-US004088.
XX
XX 20-FEB-2002; 2002US-0358580P.
XX
XX 11-MAR-2002; 2002US-0363124P.
XX
XX 06-JUN-2002; 2002US-0386782P.
XX
XX 17-JUL-2002; 2002US-0396600P.
XX
XX 29-AUG-2002; 2002US-0406784P.
XX
XX 05-SEP-2002; 2002US-0408378P.
XX
XX 09-SEP-2002; 2002US-0409293P.
XX
XX 15-JAN-2003; 2003US-0440129P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
XX
XX Mcswiggen J, Beigelman L;
XX
XX WPI; 2003-689777/65.
XX
XX New short interfering nucleic acid downregulates expression of the
```

telomerase gene useful e.g. for treatment and diagnosis of cancer.

Example 3; SEQ ID NO 542; 145pp; English.

The invention relates to short interfering nucleic acids (siNA) which downregulate expression of the one or more telomerase genes by RNA interference. The siNAs may or may not comprise ribonucleotides and may be double or single stranded. They further comprise sense and antisense regions, or alternatively are assembled from a sense oligonucleotide and an antisense oligonucleotide. Specifically, the siNAs include short interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified, can contain deoxyribonucleotides, and can be chemically synthesised, expressed from a vector or enzymatically synthesised. The invention also relates to kits for the in vitro or in vivo delivery of siNA; conjugates and/or complexes of siNA; and vectors that express siNA. The siNAs are used to modulate expression of the telomerase genes in cells, tissue explants or organisms (e.g., by ex vivo gene therapy), or in grafts and transplants for the treatment of a variety of conditions. They may be used for treating cancer, restenosis, infectious diseases (specifically protozoal), transplant rejection, or autoimmune or age-related diseases, e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration, skin ulcers and rheumatoid arthritis. The siNAs are also useful for drug screening, diagnosis, therapeutic target identification and validation, genetic engineering, pharmacogenomics, studying gene function, and gene mapping (e.g., of single nucleotide polymorphisms). The present sequence represents a chemically modified siRNA targeted to the human TERC mRNA transcript.

Sequence 21 BP; 7 A; 2 C; 6 G; 2 T; 4 U; 0 Other;

Query Match 4.2%; Score 19; DB 1; Length 21;  
Best Local Similarity 100.0%; Pred. No. 1.7e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 146 TTCACCGTTCATTCTAGA 164  
|||||  
Db 19 TTCACCGTTCATTCTAGA 1

RESULT 242  
ADF93824/c  
ID ADF93824 standard; RNA; 21 BP.  
AC ADF93824;  
XX  
XX  
DT 26-FEB-2004 (first entry)  
XX  
DE Human TERC chemically modified siRNA, SEQ ID 551.

Cytostatic; vasotropic; protozoacide; immunosuppressive; dermatological; neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic; antiarthritic; antiinflammatory; gene therapy; telomerase; human; terc; RNA interference; short interfering nucleic acid; siNA;  
short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;  
short hairpin RNA; shRNA; expression modulation; gene therapy;  
drug screening; diagnosis; therapeutic target identification;  
pharmacogenomics; gene function analysis; gene mapping; TERC; TERC;  
DNA-RNA hybrid; ss.

Synthetic.  
Homo sapiens.

Key Location/Qualifiers  
modified\_base 1..21 /\*tag= b  
/mod\_base= OTHER  
/note= "Pyrimidine bases are 2'-deoxy-2'-fluoro"  
modified\_base 20..21 /\*tag= a  
/mod\_base= OTHER  
/note= "Ribothymidines. Also, the internucleotide linkage is phosphorothioate"

XX WO2003070742-A1.  
PN  
XX  
PD 28-AUG-2003.  
XX  
PF 11-FEB-2003; 2003WO-US004088.  
XX  
PR 20-FEB-2002; 2002US-0358580P.  
PR 11-MAR-2002; 2002US-0363124P.  
PR 06-JUN-2002; 2002US-0386782P.  
PR 17-JUL-2002; 2002US-0396600P.  
PR 29-AUG-2002; 2002US-0406784P.  
PR 05-SEP-2002; 2002US-0408378P.  
PR 09-SEP-2002; 2002US-0409293P.  
PR 15-JAN-2003; 2003US-0440129P.  
XX (RIBO-) RIBOZYME PHARM INC.  
PA  
XX Mcswiggen J, Beigelman L;  
PI  
XX WPI; 2003-689777/65.  
XX  
XX  
PT New short interfering nucleic acid downregulates expression of the telomerase gene useful e.g. for treatment and diagnosis of cancer.  
XX  
PS Example 3; SEQ ID NO 551; 145pp; English.  
XX  
CC The invention relates to short interfering nucleic acids (siNA) which downregulate expression of the one or more telomerase genes by RNA interference. The siNAs may or may not comprise ribonucleotides and may be double or single stranded. They further comprise sense and antisense regions, or alternatively are assembled from a sense oligonucleotide and an antisense oligonucleotide. Specifically, the siNAs include short interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified, can contain deoxyribonucleotides, and can be chemically synthesised, expressed from a vector or enzymatically synthesised. The invention also relates to kits for the in vitro or in vivo delivery of siNA; conjugates and/or complexes of siNA; and vectors that express siNA. The siNAs are used to modulate expression of the telomerase genes in cells, tissue explants or organisms (e.g., by ex vivo gene therapy), or in grafts and transplants for the treatment of a variety of conditions. They may be used for treating cancer, restenosis, infectious diseases (specifically protozoal), transplant rejection, or autoimmune or age-related diseases, e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration, skin ulcers and rheumatoid arthritis. The siNAs are also useful for drug screening, diagnosis, therapeutic target identification and validation, genetic engineering, pharmacogenomics, studying gene function, and gene mapping (e.g., of single nucleotide polymorphisms). The present sequence represents a chemically modified siRNA targeted to the human TERC mRNA transcript.

Sequence 21 BP; 5 A; 3 C; 7 G; 2 T; 4 U; 0 Other;

Query Match 4.2%; Score 19; DB 1; Length 21;  
Best Local Similarity 100.0%; Pred. No. 1.7e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 148 CCACCGTTCATTCTAGAC 166  
|||||  
Db 19 CCACCGTTCATTCTAGAC 1

RESULT 243  
ADF93831/c  
ID ADF93831 standard; RNA; 21 BP.  
XX  
AC ADF93831;  
XX  
DT 26-FEB-2004 (first entry)  
XX  
DE Human TERC chemically modified siRNA, SEQ ID 558.  
XX

KW Cytostatic; vasotropic; protozoacide; immunosuppressive; dermatological;  
KW neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;  
KW antiarthritic; antiinflammatory; gene therapy; telomerase; human; terc;  
KW RNA interference; short interfering nucleic acid; siRNA;  
KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;  
KW short hairpin RNA; shRNA; expression modulation; gene therapy;  
KW drug screening; diagnosis; therapeutic target identification;  
KW pharmacogenomics; gene function analysis; gene mapping; TERC; TERT;  
KW DNA-RNA hybrid; ss.  
OS Synthetic.  
OS Homo sapiens.  
XX  
XX  
FH Key Location/Qualifiers  
FT 1. .21  
FT /\*tag= b  
FT /mod\_base= OTHER  
FT /note= "Pyrimidine bases are 2'-deoxy-2'-fluoro and  
FT purines are Deoxy bases"  
FT modified\_base  
FT 20. .21  
FT /\*tag= a  
FT /mod\_base= OTHER  
FT /note= "Ribothymidines. Also, the internucleotide linkage  
FT is phosphorothioate"  
XX  
PN WO2003070742-A1.  
XX  
XX 28-AUG-2003.  
XX  
XX 11-FEB-2003; 2003WO-US004088.  
XX  
XX 20-FEB-2002; 2002US-0358580P.  
XX 11-MAR-2002; 2002US-0363124P.  
XX 06-JUN-2002; 2002US-0386782P.  
XX 17-JUL-2002; 2002US-0396600P.  
XX 29-AUG-2002; 2002US-0406784P.  
XX 03-SEP-2002; 2002US-0408378P.  
XX 09-SEP-2002; 2002US-0409293P.  
XX 15-JAN-2003; 2003US-0440129P.  
XX  
XX (RIBO-) RIBOZYME PHARM INC.  
XX  
XX Mcswiggen J, Beigelman L;  
XX WPI; 2003-689777/65.  
XX  
XX New short interfering nucleic acid downregulates expression of the  
XX telomerase gene useful e.g. for treatment and diagnosis of cancer.  
XX  
XX Example 3; SEQ ID NO 558; 145pp; English.  
XX  
XX The invention relates to short interfering nucleic acids (siNA) which  
XX downregulate expression of the one or more telomerase genes by RNA  
XX interference. The siNAs may or may not comprise ribonucleotides and may  
XX be double or single stranded. They further comprise sense and antisense  
XX regions, or alternatively are assembled from a sense oligonucleotide and  
XX an antisense oligonucleotide. Specifically, the siNAs include short  
XX interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short  
XX hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,  
XX can contain deoxyribonucleotides, and can be chemically synthesised,  
XX expressed from a vector or enzymatically synthesised. The invention also  
XX relates to kits for the in vitro or in vivo delivery of siNA; conjugates  
XX and/or complexes of siNA; and vectors that express siNA. The siNAs are  
XX used to modulate expression of the telomerase genes in cells, tissue  
XX explants or organisms (e.g., by ex vivo gene therapy), or in grafts and  
XX transplants for the treatment of a variety of conditions. They may be  
XX used for treating cancer, retinosis, infectious diseases (specifically  
XX protozoal), transplant rejection, or autoimmune or age-related diseases,  
XX e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,  
XX skin ulcers and rheumatoid arthritis. The siNAs are also useful for drug  
XX screening, diagnosis, therapeutic target identification and validation,  
XX genetic engineering, pharmacogenomics, studying gene function, and gene  
XX mapping (e.g., of single nucleotide polymorphisms). The present sequence

CC represents a chemically modified siRNA targeted to the human TERC mRNA  
CC transcript.  
XX  
XX Sequence 21 BP; 7 A; 2 C; 6 G; 2 T; 4 U; 0 Other;  
SQ Query Match 4.2%; Score 19; DB 1; Length 21;  
Best Local Similarity 100.0%; Pred. No. 1.7e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 146 TTCCACCGTTCATTCTAGA 164  
Db 19 TTCCACCGTTCATTCTAGA 1  
RESULT 244  
ADF93812  
ID ADF93812 standard; RNA; 21 BP.  
XX  
XX ADF93812;  
AC  
XX 26-FEB-2004 (first entry)  
DT  
XX  
XX Human TERC chemically modified siRNA, SEQ ID 539.  
DE  
XX  
XX Cytostatic; vasotropic; protozoacide; immunosuppressive; dermatological;  
KW neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;  
KW antiarthritic; antiinflammatory; gene therapy; telomerase; human; terc;  
KW RNA interference; short interfering nucleic acid; siNA;  
KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;  
KW short hairpin RNA; shRNA; expression modulation; gene therapy;  
KW drug screening; diagnosis; therapeutic target identification;  
KW pharmacogenomics; gene function analysis; gene mapping; TERC; TERT;  
KW DNA-RNA hybrid; ss.  
XX  
XX Synthetic.  
OS  
OS Homo sapiens.  
XX  
XX Key Location/Qualifiers  
FH modified\_base 20. .21  
FT /\*tag= a  
FT /mod\_base= OTHER  
FT /note= "Ribothymidines"  
FT  
FT  
XX  
XX WO2003070742-A1.  
XX  
XX 28-AUG-2003.  
XX  
XX 11-FEB-2003; 2003WO-US004088.  
XX  
XX 20-FEB-2002; 2002US-0358580P.  
XX 11-MAR-2002; 2002US-0363124P.  
XX 06-JUN-2002; 2002US-0386782P.  
XX 17-JUL-2002; 2002US-0396600P.  
XX 29-AUG-2002; 2002US-0406784P.  
XX 03-SEP-2002; 2002US-0408378P.  
XX 09-SEP-2002; 2002US-0409293P.  
XX 15-JAN-2003; 2003US-0440129P.  
XX  
XX (RIBO-) RIBOZYME PHARM INC.  
XX  
XX Mcswiggen J, Beigelman L;  
XX WPI; 2003-689777/65.  
XX  
XX New short interfering nucleic acid downregulates expression of the  
XX telomerase gene useful e.g. for treatment and diagnosis of cancer.  
XX  
XX Example 3; SEQ ID NO 539; 145pp; English.  
XX  
XX The invention relates to short interfering nucleic acids (siNA) which  
XX downregulate expression of the one or more telomerase genes by RNA  
XX interference. The siNAs may or may not comprise ribonucleotides and may  
XX be double or single stranded. They further comprise sense and antisense  
XX regions, or alternatively are assembled from a sense oligonucleotide and  
XX an antisense oligonucleotide. Specifically, the siNAs include short  
XX interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short  
XX hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,  
XX can contain deoxyribonucleotides, and can be chemically synthesised,  
XX expressed from a vector or enzymatically synthesised. The invention also  
XX relates to kits for the in vitro or in vivo delivery of siNA; conjugates  
XX and/or complexes of siNA; and vectors that express siNA. The siNAs are  
XX used to modulate expression of the telomerase genes in cells, tissue  
XX explants or organisms (e.g., by ex vivo gene therapy), or in grafts and  
XX transplants for the treatment of a variety of conditions. They may be  
XX used for treating cancer, retinosis, infectious diseases (specifically  
XX protozoal), transplant rejection, or autoimmune or age-related diseases,  
XX e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,  
XX skin ulcers and rheumatoid arthritis. The siNAs are also useful for drug  
XX screening, diagnosis, therapeutic target identification and validation,  
XX genetic engineering, pharmacogenomics, studying gene function, and gene  
XX mapping (e.g., of single nucleotide polymorphisms). The present sequence

CC regions, or alternatively are assembled from a sense oligonucleotide and  
 CC an antisense oligonucleotide. Specifically, the siRNAs include short  
 CC interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short  
 CC hairpin RNA (shRNA). The siRNAs can be unmodified or chemically modified,  
 CC can contain deoxyribonucleotides, and can be chemically synthesised,  
 CC expressed from a vector or enzymatically synthesised. The invention also  
 CC relates to kits for the in vitro or in vivo delivery of siRNA; conjugates  
 CC and/or complexes of siRNA; and vectors that express siRNA. The siRNAs are  
 CC used to modulate expression of the telomerase genes in cells, tissue  
 CC explants or organisms (e.g., by ex vivo gene therapy), or in grafts and  
 CC transplants for the treatment of a variety of conditions. They may be  
 CC used for treating cancer, restenosis, infectious diseases (specifically  
 CC protozoal), transplant rejection, or autoimmune or age-related diseases,  
 CC e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,  
 CC skin ulcers and rheumatoid arthritis. The siRNAs are also useful for drug  
 CC screening, diagnosis, therapeutic target identification and validation,  
 CC genetic engineering, pharmacogenomics, studying gene function, and gene  
 CC mapping (e.g., of single nucleotide polymorphisms). The present sequence  
 CC represents a chemically modified siRNA targeted to the human TERC mRNA  
 CC transcript.

XX Sequence 21 BP; 4 A; 7 C; 3 G; 2 T; 5 U; 0 Other;

Query Match 4.2%; Score 19; DB 1; Length 21;

Best Local Similarity 73.7%; Pred. No. 1.7e+02;

Matches 14; Conservative 5; Mismatches 0; Indels 0; Gaps 0;

QY 148 CCACCGTTCATTCTAGAGC 166

|||||:||||:|||||

Db 1 CCACCGUUCUACUAGAGC 19

RESULT 245

ID ADF93825/c

AC ADF93825;

DT 26-FEB-2004 (first entry)

XX Human TERC chemically modified siRNA, SEQ ID 552.

DE Cytostatic; vasotropic; protozoacide; immunosuppressive; dermatological;

KW neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;

KW antiarthritic; antiinflammatory; gene therapy; telomerase; human; terc;

KW RNA interference; short interfering nucleic acid; siRNA;

KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;

KW short hairpin RNA; shRNA; expression modulation; gene therapy;

KW drug screening; diagnosis; therapeutic target identification;

KW pharmacogenomics; gene function analysis; gene mapping; TERC; TERT;

KW DNA-RNA hybrid; ss.

XX Synthetic.

OS Homo sapiens.

XX Key

PH modified\_base 1..21

FT /\*tag= b

FT /mod\_base= OTHER

FT /note= "Pyrimidine bases are 2'-deoxy-2'-fluoro"

FT modified\_base 20..21

FT /\*tag= a

FT /mod\_base= OTHER

FT /note= "Ribothymidines. Also, the internucleotide linkage

FT is phosphorothioate"

FT WO2003070742-A1.

XX 28-AUG-2003.

XX 11-FEB-2003; 2003WO-US004088.

XX 20-FEB-2002; 2002US-0358580P.

PR 11-MAR-2002; 2002US-0363124P.

PR 06-JUN-2002; 2002US-0386782P.

PR 17-JUL-2002; 2002US-0396600P.

PR 29-AUG-2002; 2002US-0406784P.

PR 05-SEP-2002; 2002US-0408378P.

PR 09-SEP-2002; 2002US-0409293P.

PR 15-JAN-2003; 2003US-0440129P.

XX (RIBO-) RIBOZYME PHARM INC.

XX Mcswiggen J, Beigelman L;

PI WPI; 2003-689777/65.

DR New short interfering nucleic acid downregulates expression of the

XX telomerase gene useful e.g. for treatment and diagnosis of cancer.

PS Example 3; SEQ ID NO 552; 145pp; English.

XX The invention relates to short interfering nucleic acids (siRNA) which  
 CC downregulate expression of the one or more telomerase genes by RNA  
 CC interference. The siRNAs may or may not comprise ribonucleotides and may  
 CC be double or single stranded. They further comprise sense and antisense  
 CC regions, or alternatively are assembled from a sense oligonucleotide and  
 CC an antisense oligonucleotide. Specifically, the siRNAs include short  
 CC interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short  
 CC hairpin RNA (shRNA). The siRNAs can be unmodified or chemically modified,  
 CC can contain deoxyribonucleotides, and can be chemically synthesised,  
 CC expressed from a vector or enzymatically synthesised. The invention also  
 CC relates to kits for the in vitro or in vivo delivery of siRNA; conjugates  
 CC and/or complexes of siRNA; and vectors that express siRNA. The siRNAs are  
 CC used to modulate expression of the telomerase genes in cells, tissue  
 CC explants or organisms (e.g., by ex vivo gene therapy), or in grafts and  
 CC transplants for the treatment of a variety of conditions. They may be  
 CC used for treating cancer, restenosis, infectious diseases (specifically  
 CC protozoal), transplant rejection, or autoimmune or age-related diseases,  
 CC e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,  
 CC skin ulcers and rheumatoid arthritis. The siRNAs are also useful for drug  
 CC screening, diagnosis, therapeutic target identification and validation,  
 CC genetic engineering, pharmacogenomics, studying gene function, and gene  
 CC mapping (e.g., of single nucleotide polymorphisms). The present sequence  
 CC represents a chemically modified siRNA targeted to the human TERC mRNA  
 CC transcript.

XX Sequence 21 BP; 5 A; 7 C; 3 G; 2 T; 4 U; 0 Other;

Query Match 4.2%; Score 19; DB 1; Length 21;

Best Local Similarity 100.0%; Pred. No. 1.7e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 300 GAAGAGTTGGGCTCTGTCA 318

|||||:|||||:|||||

Db 19 GAAGAGTTGGGCTCTGTCA 1

RESULT 246

ID ADF93817/c

XX ADF93817 standard; RNA; 21 BP.

AC ADF93817;

XX 26-FEB-2004 (first entry)

DT Human TERC chemically modified siRNA, SEQ ID 544.

XX Cytostatic; vasotropic; protozoacide; immunosuppressive; dermatological;

KW neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;

KW antiarthritic; antiinflammatory; gene therapy; telomerase; human; terc;

KW RNA interference; short interfering nucleic acid; siRNA;

KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;

KW short hairpin RNA; shRNA; expression modulation; gene therapy;

KW drug screening; diagnosis; therapeutic target identification;

KW pharmacogenomics; gene function analysis; gene mapping; TERC; TERT;



CC used to modulate expression of the telomerase genes in cells, tissue  
CC explants or organisms (e.g., by ex vivo gene therapy), or in grafts and  
CC transplants for the treatment of a variety of conditions. They may be  
CC used for treating cancer, restenosis, infectious diseases (specifically  
CC protozoal), transplant rejection, or autoimmune or age-related diseases,  
CC e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,  
CC skin ulcers and rheumatoid arthritis. The siRNAs are also useful for drug  
CC screening, diagnosis, therapeutic target identification and validation,  
CC genetic engineering, pharmacogenomics, studying gene function, and gene  
CC mapping (e.g., of single nucleotide polymorphisms). The present sequence  
CC represents a chemically modified siRNA targeted to the human TERC mRNA  
CC transcript.

XX SQ Sequence 21 BP; 5 A; 3 C; 7 G; 2 T; 4 U; 0 Other;

Query Match 4.2%; Score 19; DB 1; Length 21;  
Best Local Similarity 100.0%; Pred. No. 1.7e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 148 CCACCGTTCATTCAGAGC 166  
Db 19 CCACCGTTCATTCAGAGC 1

RESULT 248

ADF93811  
ID ADF93811 standard; RNA; 21 BP.

AC ADF93811;

XX 26-FEB-2004 (first entry)

XX Human TERC chemically modified siRNA, SEQ ID 538.

XX Cytostatic; vasotropic; protozoacide; immunosuppressive; dermatological;  
KW neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;  
KW antiarthritic; antiinflammatory; gene therapy; telomerase; human; terc;  
KW RNA interference; short interfering nucleic acid; siRNA;  
KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;  
KW short hairpin RNA; shRNA; expression modulation; gene therapy;  
KW drug screening; diagnosis; therapeutic target identification;  
KW pharmacogenomics; gene function analysis; gene mapping; TERC; TERT;  
KW DNA-RNA hybrid; ss.

XX Synthetic.

OS Homo sapiens.

XX Key Location/Qualifiers

FN modified\_base 20..21

FT /\*tag= a

FT /mod\_base= OTHER

FT /note= "Ribothymidines"

XX WO2003070742-A1.

XX 28-AUG-2003.

XX 11-FEB-2003; 2003WO-US004088.

XX 20-FEB-2002; 2002US-0358580P.

PR 11-MAR-2002; 2002US-0363124P.

PR 06-JUN-2002; 2002US-0386782P.

PR 17-JUL-2002; 2002US-0396600P.

PR 29-AUG-2002; 2002US-0406784P.

PR 05-SEP-2002; 2002US-0408378P.

PR 09-SEP-2002; 2002US-0409293P.

PR 15-JAN-2003; 2003US-0440129P.

XX (RIBO-) RIBOZYME PHARM INC.

XX Mcswiggen J, Beigelman L;

XX WFI; 2003-689777/65.

DR

XX New short interfering nucleic acid downregulates expression of the  
PT telomerase gene useful e.g. for treatment and diagnosis of cancer.

XX Example 3; SEQ ID NO 538; 145pp; English.

XX The invention relates to short interfering nucleic acids (siNA) which  
CC downregulate expression of the one or more telomerase genes by RNA  
CC interference. The siNAs may or may not comprise ribonucleotides and may  
CC be double or single stranded. They further comprise sense and antisense  
CC regions, or alternatively are assembled from a sense oligonucleotide and  
CC an antisense oligonucleotide. Specifically, the siNAs include short  
CC interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short  
CC hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,  
CC can contain deoxyribonucleotides, and can be chemically synthesised,  
CC expressed from a vector or enzymatically synthesised. The invention also  
CC relates to kits for the in vitro or in vivo delivery of siNA; conjugates  
CC and/or complexes of siNA; and vectors that express siNA. The siNAs are  
CC used to modulate expression of the telomerase genes in cells, tissue  
CC explants or organisms (e.g., by ex vivo gene therapy), or in grafts and  
CC transplants for the treatment of a variety of conditions. They may be  
CC used for treating cancer, restenosis, infectious diseases (specifically  
CC protozoal), transplant rejection, or autoimmune or age-related diseases,  
CC e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,  
CC skin ulcers and rheumatoid arthritis. The siNAs are also useful for drug  
CC screening, diagnosis, therapeutic target identification and validation,  
CC genetic engineering, pharmacogenomics, studying gene function, and gene  
CC mapping (e.g., of single nucleotide polymorphisms). The present sequence  
CC represents a chemically modified siRNA targeted to the human TERC mRNA  
CC transcript.

XX SQ Sequence 21 BP; 4 A; 6 C; 2 G; 2 T; 7 U; 0 Other;

Query Match 4.2%; Score 19; DB 1; Length 21;

Best Local Similarity 63.2%; Pred. No. 1.7e+02;

Matches 12; Conservative 7; Mismatches 0; Indels 0; Gaps 0;

QY 146 TTCACCGTTCATTCAGAGC 164

Db 1 UUCGACCGUUCUUCUAGA 19

RESULT 249

ADF93813

ID ADF93813 standard; RNA; 21 BP.

XX ADF93813;

XX 26-FEB-2004 (first entry)

XX Human TERC chemically modified siRNA, SEQ ID 540.

XX Cytostatic; vasotropic; protozoacide; immunosuppressive; dermatological;  
KW neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;  
KW antiarthritic; antiinflammatory; gene therapy; telomerase; human; terc;  
KW RNA interference; short interfering nucleic acid; siNA;  
KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;  
KW short hairpin RNA; shRNA; expression modulation; gene therapy;  
KW drug screening; diagnosis; therapeutic target identification;  
KW pharmacogenomics; gene function analysis; gene mapping; TERC; TERT;  
KW DNA-RNA hybrid; ss.

XX Synthetic.

OS Homo sapiens.

XX Key Location/Qualifiers

FN modified\_base 20..21 a

FT /\*tag=

FT /mod\_base= OTHER

FT /note= "Ribothymidines"

XX WO2003070742-A1.

XX



PD 28-AUG-2003.

XX 11-FEB-2003; 2003WO-US004088.

XX 20-FEB-2002; 2002US-0358580P.

XX 11-MAR-2002; 2002US-0363124P.

PR 06-JUN-2002; 2002US-0386782P.

PR 17-JUL-2002; 2002US-0396600P.

PR 29-AUG-2002; 2002US-0406784P.

PR 05-SEP-2002; 2002US-0408378P.

PR 09-SEP-2002; 2002US-0409293P.

PR 15-JAN-2003; 2003US-0440129P.

XX (RIBO-) RIBOZYME PHARM INC.

XX Mcswiggen J, Beigelman J;

PI WPI; 2003-689777/65.

DR New short interfering nucleic acid downregulates expression of the

XX telomerase gene useful e.g. for treatment and diagnosis of cancer.

PS Example 3; SEQ ID NO 540; 145pp; English.

XX The invention relates to short interfering nucleic acids (siNA) which

CC downregulate expression of the one or more telomerase genes by RNA

CC interference. The siNAs may or may not comprise ribonucleotides and may

CC be double or single stranded. They further comprise sense and antisense

CC regions, or alternatively are assembled from a sense oligonucleotide and

CC an antisense oligonucleotide. Specifically, the siNAs include short

CC interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short

CC hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,

CC can contain deoxyribonucleotides, and can be chemically synthesised,

CC expressed from a vector or enzymatically synthesised. The invention also

CC relates to kits for the in vitro or in vivo delivery of siNA; conjugates

CC and/or complexes of siNA; and vectors that express siNA. The siNAs are

CC used to modulate expression of the telomerase genes in cells, tissue

CC explants or organisms (e.g., by ex vivo gene therapy), or in grafts and

CC transplantants for the treatment of a variety of conditions. They may be

CC used for treating cancer, restenosis, infectious diseases (specifically

CC protozoal), transplant rejection, or autoimmune or age-related diseases,

CC e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,

CC skin ulcers and rheumatoid arthritis. The siNAs are also useful for drug

CC screening, diagnosis, therapeutic target identification and validation,

CC genetic engineering, pharmacogenomics, studying gene function, and gene

CC mapping (e.g., of single nucleotide polymorphisms). The present sequence

CC represents a chemically modified siRNA targeted to the human TERC mRNA

CC transcript.

XX SQ Sequence 21 BP; 4 A; 3 C; 7 G; 2 T; 5 U; 0 Other;

Query Match 4.2%; Score 19; DB 1; Length 21;

Best Local Similarity 73.7%; Pred No. 1.7e+02;

Matches 14; Conservative 5; Mismatches 0; Indels 0; Gaps 0;

Qy 300 GAAGAGTGGGCTGTGCA 318

Db 1 GAAGAGUUGGCGUCUGCA 19

RESULT 250

AD93833/c

ID AD93833 standard; RNA; 21 BP.

XX AD93833;

AC AD93833;

XX 26-FEB-2004 (first entry)

DT Human TERC chemically modified siRNA, SEQ ID 560.

DE Cytostatic; vasotropic; prozoacide; immunosuppressive; dermatological;

XX neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;

KW antiarthritic; antiinflammatory; gene therapy; telomerase; human; terc;

KW RNA interference; short interfering nucleic acid; siNA;

KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;

KW short hairpin RNA; shRNA; expression modulation; gene therapy;

KW drug screening; diagnosis; therapeutic target identification;

KW pharmacogenomics; gene function analysis; gene mapping; TERC; TERC;

KW DNA-RNA Hybrid; ss.

XX Synthetic.

OS Homo sapiens.

XX Key Location/Qualifiers

FT modified\_base 1..21

FT /\*tag= b

FT /mod\_base= OTHER

FT /note= "Pyrimidine bases are 2'-deoxy-2'-fluoro and

FT purines are Deoxy bases"

FT modified\_base 20..21

FT /\*tag= a

FT /mod\_base= OTHER

FT /note= "Ribothymidines. Also, the internucleotide linkage

FT is phosphorothioate"

XX WO2003070742-A1.

PN 28-AUG-2003.

PD 11-FEB-2003; 2003WO-US004088.

XX 20-FEB-2002; 2002US-0358580P.

XX 11-MAR-2002; 2002US-0363124P.

PR 06-JUN-2002; 2002US-0386782P.

PR 17-JUL-2002; 2002US-0396600P.

PR 29-AUG-2002; 2002US-0406784P.

PR 05-SEP-2002; 2002US-0408378P.

PR 09-SEP-2002; 2002US-0409293P.

PR 15-JAN-2003; 2003US-0440129P.

XX (RIBO-) RIBOZYME PHARM INC.

XX Mcswiggen J, Beigelman J;

PI WPI; 2003-689777/65.

DR New short interfering nucleic acid downregulates expression of the

XX telomerase gene useful e.g. for treatment and diagnosis of cancer.

PS Example 3; SEQ ID NO 560; 145pp; English.

XX The invention relates to short interfering nucleic acids (siNA) which

CC downregulate expression of the one or more telomerase genes by RNA

CC interference. The siNAs may or may not comprise ribonucleotides and may

CC be double or single stranded. They further comprise sense and antisense

CC regions, or alternatively are assembled from a sense oligonucleotide and

CC an antisense oligonucleotide. Specifically, the siNAs include short

CC interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short

CC hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,

CC can contain deoxyribonucleotides, and can be chemically synthesised,

CC expressed from a vector or enzymatically synthesised. The invention also

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CC used to modulate expression of the telomerase genes in cells, tissue

CC explants or organisms (e.g., by ex vivo gene therapy), or in grafts and

CC transplantants for the treatment of a variety of conditions. They may be

CC used for treating cancer, restenosis, infectious diseases (specifically

CC protozoal), transplant rejection, or autoimmune or age-related diseases,

CC e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,

CC skin ulcers and rheumatoid arthritis. The siNAs are also useful for drug

CC screening, diagnosis, therapeutic target identification and validation,

CC genetic engineering, pharmacogenomics, studying gene function, and gene

CC mapping (e.g., of single nucleotide polymorphisms). The present sequence

CC represents a chemically modified siRNA targeted to the human TERC mRNA

CC transcript.

```

SQ Sequence 21 BP; 5 A; 7 C; 3 G; 2 T; 4 U; 0 Other;
Query Match 4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1.7e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 300 GAAGAGTTGGGCTCTGTCA 318
DB 19 GAAGAGTTGGGCTCTGTCA 1
RESULT 251
ADF93816/c
ID ADF93816 standard; RNA; 21 BP.
XX
AC ADF93816;
XX
DT 26-FEB-2004 (first entry)
XX
DE Human TERC chemically modified siRNA, SEQ ID 543.
XX
KW Cytostatic; vasotropic; protozoacide; immunosuppressive; dermatological;
KW neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;
KW antiarthritic; antinflammatory; gene therapy; telomerase; human; terc;
KW RNA interference; short interfering nucleic acid; siRNA;
KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;
KW short hairpin RNA; shRNA; expression modulation; gene therapy;
KW drug screening; diagnosis; therapeutic target identification;
KW pharmacogenomics; gene function analysis; gene mapping; TERC; TERT;
KW DNA-RNA hybrid; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT modified_base 20..21 /*tag= a
FT /*mod_base= OTHER
FT /*note= "Ribothymidines"
XX
PN WO2003070742-A1.
XX
PD 28-AUG-2003.
XX
PF 11-FEB-2003; 2003WO-US004088.
XX
PR 20-FEB-2002; 2002US-0358580P.
PR 06-JUN-2002; 2002US-0386782P.
PR 17-JUL-2002; 2002US-0396600P.
PR 29-AUG-2002; 2002US-0406784P.
PR 05-SEP-2002; 2002US-0408378P.
PR 09-SEP-2002; 2002US-0409293P.
PR 15-JAN-2003; 2003US-0440129P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Mcswiggen J, Beigelman L;
XX
XX WPI; 2003-689777/65.
XX
DR New short interfering nucleic acid downregulates expression of the
PT telomerase gene useful e.g. for treatment and diagnosis of cancer.
XX
XX Example 3; SEQ ID NO 543; 145pp; English.
XX
CC The invention relates to short interfering nucleic acids (siNA) which
CC downregulate expression of the one or more telomerase genes by RNA
CC interference. The siNAs may or may not comprise ribonucleotides and may
CC be double or single stranded. They further comprise sense and antisense
CC regions, or alternatively are assembled from a sense oligonucleotide and
CC an antisense oligonucleotide. Specifically, the siNAs include short
CC interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short

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CC hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,
CC can contain deoxyribonucleotides, and can be chemically synthesised,
CC expressed from a vector or enzymatically synthesised. The invention also
CC relates to kits for the in vitro or in vivo delivery of siNA; conjugates
CC and/or complexes of siNA; and vectors that express siNA. The siNAs are
CC used to modulate expression of the telomerase genes in cells, tissue
CC explants or organisms (e.g., by ex vivo gene therapy), or in grafts and
CC transplants for the treatment of a variety of conditions. They may be
CC used for treating cancer, restenosis, infectious diseases (specifically
CC protozoal), transplant rejection, or autoimmune or age-related diseases,
CC e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,
CC skin ulcers and rheumatoid arthritis. The siNAs are also useful for drug
CC screening, diagnosis, therapeutic target identification and validation,
CC genetic engineering, pharmacogenomics, studying gene function, and gene
CC mapping (e.g., of single nucleotide polymorphisms). The present sequence
CC represents a chemically modified siRNA targeted to the human TERC mRNA
XX
SQ Sequence 21 BP; 5 A; 3 C; 7 G; 2 T; 4 U; 0 Other;
Query Match 4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1.7e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 148 CCACCGTTCACTCTAGAC 166
DB 19 CCACCGTTCACTCTAGAC 1
RESULT 252
ADF93823/c
ID ADF93823 standard; RNA; 21 BP.
XX
AC ADF93823;
XX
DT 26-FEB-2004 (first entry)
XX
DE Human TERC chemically modified siRNA, SEQ ID 550.
XX
KW Cytostatic; vasotropic; protozoacide; immunosuppressive; dermatological;
KW neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;
KW antiarthritic; antinflammatory; gene therapy; telomerase; human; terc;
KW RNA interference; short interfering nucleic acid; siNA;
KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;
KW short hairpin RNA; shRNA; expression modulation; gene therapy;
KW drug screening; diagnosis; therapeutic target identification;
KW pharmacogenomics; gene function analysis; gene mapping; TERC; TERT;
KW DNA-RNA hybrid; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT modified_base 1..21 /*tag= b
FT /*mod_base= OTHER
FT /*note= "Pyrimidine bases are 2'-deoxy-2'-fluoro"
FT modified_base 20..21 /*tag= a
FT /*mod_base= OTHER
FT /*note= "Ribothymidines. Also, the internucleotide linkage
XX is phosphorothioate"
XX
PN WO2003070742-A1.
XX
PD 28-AUG-2003.
XX
PF 11-FEB-2003; 2003WO-US004088.
XX
PR 20-FEB-2002; 2002US-0358580P.
PR 11-MAR-2002; 2002US-0363124P.
PR 06-JUN-2002; 2002US-0386782P.
PR 17-JUL-2002; 2002US-0396600P.

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PR 29-AUG-2002; 2002US-0406784P.
PR 05-SEP-2002; 2002US-0408378P.
PR 09-SEP-2002; 2002US-0409293P.
PR 15-JAN-2003; 2003US-0440129P.
XX (RIBO-) RIBOZYME PHARM INC.
XX
XX Mcswiggen J, Beigelman L;
XX
XX WPI; 2003-689777/65.
XX
XX New short interfering nucleic acid downregulates expression of the
XX telomerase gene useful e.g. for treatment and diagnosis of cancer.
XX
XX Example 3; SEQ ID NO 550; 145pp; English.
XX
XX The invention relates to short interfering nucleic acids (siNA) which
XX downregulate expression of the one or more telomerase genes by RNA
XX interference. The siNAs may or may not comprise ribonucleotides and may
XX be double or single stranded. They further comprise sense and antisense
XX regions, or alternatively are assembled from a sense oligonucleotide and
XX an antisense oligonucleotide. Specifically, the siNAs include short
XX interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short
XX hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,
XX can contain deoxyribonucleotides, and can be chemically synthesised,
XX expressed from a vector or enzymatically synthesised. The invention also
XX relates to kits for the in vitro or in vivo delivery of siNA; conjugates
XX and/or complexes of siNA; and vectors that express siNA. The siNAs are
XX used to modulate expression of the telomerase genes in cells, tissue
XX explants or organisms (e.g., by ex vivo gene therapy), or in grafts and
XX transplants for the treatment of a variety of conditions. They may be
XX used for treating cancer, restenosis, infectious diseases (specifically
XX protoal), transplant rejection, or autoimmune or age-related diseases,
XX e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,
XX skin ulcers and rheumatoid arthritis. The siNAs are also useful for drug
XX screening, diagnosis, therapeutic target identification and validation,
XX genetic engineering, pharmacogenomics, studying gene function, and gene
XX mapping (e.g., of single nucleotide polymorphisms). The present sequence
XX represents a chemically modified siRNA targeted to the human TERC mRNA
XX transcript.
XX
XX Sequence 21 BP; 7 A; 2 C; 6 G; 2 T; 4 U; 0 Other;
XX
XX Query Match 4.2%; Score 19; DB 1; Length 21;
XX Best Local Similarity 100.0%; Pred. No. 1.7e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
Qy 146 TTCACCGTTCATTCTAGA 164
Db |||||
19 TTCACCGTTCATTCTAGA 1

RESULT 253
ADG30042/C
ID ADG30042 standard; RNA; 21 BP.
XX
XX AC ADG30042;
XX
XX DT 26-FEB-2004 (first entry)
XX
XX hTR-targeted siNA DNA-RNA hybrid - SEQ ID 608.
XX
XX double-stranded short interfering nucleic acid; siNA;
XX antiarteriosclerotic; neuroprotective; neurotropic; antiparkinsonian;
XX anticonvulsant; pulmonary disease; restenosis; atherosclerosis;
XX Alzheimer's; Parkinson's; epilepsy; dementia; huntington's;
XX amyotrophic lateral sclerosis; gene therapy; ss; DNA-RNA hybrid; hTR.
XX
XX Unidentified.
XX Synthetic.
XX
XX WO2003074654-A2.
XX

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PD 12-SEP-2003.
XX
XX 20-FEB-2003; 2003WO-US005028.
XX
XX 20-FEB-2002; 2002US-0358580P.
XX 11-MAR-2002; 2002US-0363124P.
XX 06-JUN-2002; 2002US-0386782P.
XX 29-AUG-2002; 2002US-0406784P.
XX 05-SEP-2002; 2002US-0408378P.
XX 09-SEP-2002; 2002US-0409293P.
XX 15-JAN-2003; 2003US-0440129P.
XX (SIRN-) SIRNA THERAPEUTICS INC.
XX
XX Mcswiggen J, Beigelman L, Chowrira B, Pavco P, Fosnaugh K;
XX Jamison S, Usman N, Thompson J;
XX
XX WPI; 2003-731676/69.
XX
XX New double-stranded short interfering nucleic acid molecule, useful for
XX down-regulating the expression of an endogenous mammalian target gene or
XX for treating diseases that respond to modulation of gene expression or
XX activity.
XX
XX Example 24; SEQ ID NO 608; 593pp; English.
XX
XX The invention relates to a double-stranded short interfering nucleic acid
XX (siNA) molecule that down-regulates expression of an endogenous mammalian
XX target gene comprising one or more chemical modifications and each strand
XX of the double-stranded siNA comprises about 21 nucleotides. The siNA of
XX the invention demonstrates antiarteriosclerotic, neuroprotective,
XX neurotropic, antiparkinsonian and anticonvulsant activities and may be
XX useful for down-regulating the expression of an endogenous mammalian
XX target gene and therefore in the treatment of any disease or condition
XX that responds to modulation of gene expression or activity in a cell,
XX tissue or organism. The disease or condition may include pulmonary
XX diseases such as restenosis, atherosclerosis, Alzheimer's disease,
XX Parkinson's disease, epilepsy, dementia, huntington's disease or
XX amyotrophic lateral sclerosis. Furthermore, the siNA may be utilised for
XX gene therapy applications. The current sequence is that of the siNA DNA-
XX RNA hybrid of the invention.
XX
XX Sequence 21 BP; 7 A; 2 C; 6 G; 2 T; 4 U; 0 Other;
XX
XX Query Match 4.2%; Score 19; DB 1; Length 21;
XX Best Local Similarity 100.0%; Pred. No. 1.7e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
Qy 146 TTCACCGTTCATTCTAGA 164
Db |||||
19 TTCACCGTTCATTCTAGA 1

RESULT 254
ADG30043/C
ID ADG30043 standard; RNA; 21 BP.
XX
XX AC ADG30043;
XX
XX DT 26-FEB-2004 (first entry)
XX
XX hTR-targeted siNA DNA-RNA hybrid - SEQ ID 609.
XX
XX double-stranded short interfering nucleic acid; siNA;
XX antiarteriosclerotic; neuroprotective; neurotropic; antiparkinsonian;
XX anticonvulsant; pulmonary disease; restenosis; atherosclerosis;
XX Alzheimer's; Parkinson's; epilepsy; dementia; huntington's;
XX amyotrophic lateral sclerosis; gene therapy; ss; DNA-RNA hybrid; hTR.
XX
XX Unidentified.
XX Synthetic.
XX
XX WO2003074654-A2.
XX

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XX PD 12-SEP-2003.
XX PF 20-FEB-2003; 2003WO-US005028.
XX PR 20-FEB-2002; 2002US-0358580P.
XX PR 11-MAR-2002; 2002US-0363124P.
XX PR 06-JUN-2002; 2002US-0386782P.
XX PR 29-AUG-2002; 2002US-0406784P.
XX PR 05-SEP-2002; 2002US-0408378P.
XX PR 09-SEP-2002; 2002US-0409293P.
XX PR 15-JAN-2003; 2003US-0440129P.
XX PA (SIRN-) SIRNA THERAPEUTICS INC.
XX PI McSwiggen J, Beigelman L, Chowrira B, Pavco P, Fosnaugh K;
XX PI Jamison S, Usman N, Thompson J;
XX DR WPI; 2003-731676/69.
XX PT New double-stranded short interfering nucleic acid molecule, useful for
XX PT down-regulating the expression of an endogenous mammalian target gene or
XX PT for treating diseases that respond to modulation of gene expression or
XX PT activity.
XX PS Example 24; SEQ ID NO 609; 593pp; English.
XX CC The invention relates to a double-stranded short interfering nucleic acid
XX CC (siNA) molecule that down-regulates expression of an endogenous mammalian
XX CC target gene comprising one or more chemical modifications and each strand
XX CC of the double-stranded siNA comprises about 21 nucleotides. The siNA of
XX CC the invention demonstrates antiarteriosclerotic, neuroprotective,
XX CC neurotropic, antiparkinsonian and anticonvulsant activities and may be
XX CC useful for down-regulating the expression of an endogenous mammalian
XX CC target gene and therefore in the treatment of any disease or condition
XX CC that responds to modulation of gene expression or activity in a cell,
XX CC tissue or organism. The disease or condition may include pulmonary
XX CC diseases such as restenosis, atherosclerosis, Alzheimer's disease,
XX CC Parkinson's disease, epilepsy, dementia, huntington's disease or
XX CC amyotrophic lateral sclerosis. Furthermore, the siNA may be utilised for
XX CC gene therapy applications. The current sequence is that of the siNA DNA-
XX CC RNA hybrid of the invention.
XX SQ Sequence 21 BP; 5 A; 3 C; 7 G; 2 T; 4 U; 0 Other;
Query Match 4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1.7e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 148 CCACCGTTCATTCTAGAGC 166
Db 19 CCACCGTTCATTCTAGAGC 1
RESULT 255
ADG30044/c
ID ADG30044 standard; RNA; 21 BP.
XX AC ADG30044;
XX DT 26-FEB-2004 (first entry)
XX DE hTR-targeted siNA DNA-RNA hybrid - SEQ ID 610.
XX KW double-stranded short interfering nucleic acid; siNA;
XX KW antiarteriosclerotic; neuroprotective; neurotropic; antiparkinsonian;
XX KW anticonvulsant; pulmonary disease; restenosis; atherosclerosis;
XX KW Alzheimer's; Parkinson's; epilepsy; dementia; huntington's;
XX KW amyotrophic lateral sclerosis; gene therapy; ss; DNA-RNA hybrid; hTR.
XX OS Unidentified.
XX OS Synthetic.
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PN WO2003074654-A2.
XX PD 12-SEP-2003.
XX PF 20-FEB-2003; 2003WO-US005028.
XX PR 20-FEB-2002; 2002US-0358580P.
XX PR 11-MAR-2002; 2002US-0363124P.
XX PR 06-JUN-2002; 2002US-0386782P.
XX PR 29-AUG-2002; 2002US-0406784P.
XX PR 05-SEP-2002; 2002US-0408378P.
XX PR 09-SEP-2002; 2002US-0409293P.
XX PR 15-JAN-2003; 2003US-0440129P.
XX PA (SIRN-) SIRNA THERAPEUTICS INC.
XX PI McSwiggen J, Beigelman L, Chowrira B, Pavco P, Fosnaugh K;
XX PI Jamison S, Usman N, Thompson J;
XX DR WPI; 2003-731676/69.
XX PT New double-stranded short interfering nucleic acid molecule, useful for
XX PT down-regulating the expression of an endogenous mammalian target gene or
XX PT for treating diseases that respond to modulation of gene expression or
XX PT activity.
XX PS Example 24; SEQ ID NO 610; 593pp; English.
XX CC The invention relates to a double-stranded short interfering nucleic acid
XX CC (siNA) molecule that down-regulates expression of an endogenous mammalian
XX CC target gene comprising one or more chemical modifications and each strand
XX CC of the double-stranded siNA comprises about 21 nucleotides. The siNA of
XX CC the invention demonstrates antiarteriosclerotic, neuroprotective,
XX CC neurotropic, antiparkinsonian and anticonvulsant activities and may be
XX CC useful for down-regulating the expression of an endogenous mammalian
XX CC target gene and therefore in the treatment of any disease or condition
XX CC that responds to modulation of gene expression or activity in a cell,
XX CC tissue or organism. The disease or condition may include pulmonary
XX CC diseases such as restenosis, atherosclerosis, Alzheimer's disease,
XX CC Parkinson's disease, epilepsy, dementia, huntington's disease or
XX CC amyotrophic lateral sclerosis. Furthermore, the siNA may be utilised for
XX CC gene therapy applications. The current sequence is that of the siNA DNA-
XX CC RNA hybrid of the invention.
XX SQ Sequence 21 BP; 5 A; 7 C; 3 G; 2 T; 4 U; 0 Other;
Query Match 4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1.7e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 300 GAAGAGTTCGGCTCTGTCA 318
Db 19 GAAGAGTTCGGCTCTGTCA 1
RESULT 256
ACC58028
ID ACC58028 standard; DNA; 21 BP.
XX AC ACC58028;
XX DT 11-AUG-2003 (first entry)
XX DE Short interfering RNA hTR#2 siRNA, targets telomerase RNA.
XX KW RNA interference; short interfering RNA; siRNA; telomerase; cancer;
XX KW tumour; cytostatic; contraceptive; immunosuppressive; antiinfertility;
XX KW fungicide; antiparasitic; antiinflammatory; human; gene therapy;
XX KW DNA-RNA hybrid; ss.
XX OS Synthetic.
XX OS Key
XX FH Location/Qualifiers
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FT misc\_feature 1. .19  
 FT /\*tag= b  
 FT /note= "double-stranded region, specifically referred to  
 FT in Claim 11"  
 FT misc\_feature 1  
 FT /\*tag= a  
 FT /label= Sticky\_end  
 FT /note= "the 3' end of the complementary strand overhangs  
 FT the 5' end of this strand by the sequence 5'-TT-3'"  
 FT 20. .21  
 FT /\*tag= c  
 FT /label= Sticky\_end  
 FT  
 XX WO2003035667-A2.  
 XX  
 XX 01-MAY-2003.  
 XX  
 XX 16-OCT-2002; 2002WO-US033065.  
 XX  
 XX 22-OCT-2001; 2001US-0345326P.  
 XX  
 XX 20-FEB-2002; 2002US-0359196P.  
 XX  
 XX 22-MAY-2002; 2002US-0383195P.  
 XX  
 XX (UYRP ) UNIV ROCHESTER.  
 XX  
 XX Rowley PT;  
 XX  
 XX WPI; 2003-403336/38.  
 XX  
 XX Novel double-stranded short interfering RNA having sense and antisense  
 XX nucleic acids which are complementary to each other and to target nucleic  
 XX acid e.g., telomerase RNA or mRNA encoding telomerase reverse  
 XX transcriptase.  
 XX  
 XX Claim 11; Page 28; 37pp; English.  
 XX  
 XX The present sequence is that of a short interfering RNA, denoted hTR#2  
 XX siRNA, a 19 bp sequence centred in the 26 bp loop in the longest single-  
 XX stranded region of human telomerase RNA. The siRNA comprises sense and  
 XX antisense nucleic acids that are complementary to each other except for 2  
 XX thymidine deoxynucleotides at both 3' overhangs. A nucleic acid  
 XX comprising the double-stranded region of this siRNA is specifically  
 XX claimed. The invention relates to the discovery that double-stranded  
 XX interfering RNAs which target telomerase RNA, or mRNA encoding telomerase  
 XX reverse transcriptase (TERT), are capable of inhibiting telomerase  
 XX activity. Inhibition of telomerase in cancer cells leads to telomere  
 XX shortening, end-to-end chromosomal fusion, and apoptosis. Interference of  
 XX telomerase activity can also be used for treatment of infertility, for  
 XX contraception or sterilisation, for immunosuppression, for treatment of  
 XX yeast, parasite and fungal infections, and in antiinflammatory therapies.  
 XX As telomerase is active in a limited number of cell types, e.g. tumour  
 XX cells, germline cells, certain stem cells of the haematopoietic system, T  
 XX and B cells, sun-damaged skin, and proliferative cervix, most normal  
 XX cells are not affected by telomerase RNA interference therapy  
 XX  
 XX Sequence 21 BP; 2 A; 8 C; 6 G; 5 T; 0 U; 0 Other;  
 XX  
 XX Query Match 4.2%; Score 19; DB 1; Length 21;  
 XX Best Local Similarity 100.0%; Pred. No. 1.7e+02;  
 XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 OY 270 GGCTTCTCCGAGGCACCC 288  
 DB 1 GGCTTCTCCGAGGCACCC 19  
 RESULT 257  
 ACC58027  
 ID ACC58027 standard; DNA; 21 BP.  
 XX  
 AC ACC58027;  
 XX  
 DT 11-AUG-2003 (first entry)

XX Short interfering RNA hTR#1 siRNA, targets telomerase RNA.  
 DE RNA interference; short interfering RNA; siRNA; telomerase RNA.  
 XX  
 KW tumour; cytostatic; contraceptive; immunosuppressive; antiinfertility;  
 KW fungicide; antiparasitic; antiinflammatory; human; gene therapy;  
 KW DNA-RNA hybrid; ss.  
 XX  
 OS Synthetic.  
 XX  
 XX Key Location/Qualifiers  
 FT misc\_feature 1..19  
 FT /\*tag= b  
 FT /note= "double-stranded region, specifically referred to  
 FT in Claim 10"  
 FT misc\_feature 1  
 FT /\*tag= a  
 FT /label= Sticky\_end  
 FT /note= "the 3' end of the complementary strand overhangs  
 FT the 5' end of this strand by the sequence 5'-TT-3'"  
 FT 20. .21  
 FT /\*tag= c  
 FT /label= Sticky\_end  
 FT  
 XX WO2003035667-A2.  
 XX  
 XX 01-MAY-2003.  
 XX  
 XX 16-OCT-2002; 2002WO-US033065.  
 XX  
 XX 22-OCT-2001; 2001US-0345326P.  
 XX  
 XX 20-FEB-2002; 2002US-0359196P.  
 XX  
 XX 22-MAY-2002; 2002US-0383195P.  
 XX  
 XX (UYRP ) UNIV ROCHESTER.  
 XX  
 XX Rowley PT;  
 XX  
 XX WPI; 2003-403336/38.  
 XX  
 XX Novel double-stranded short interfering RNA having sense and antisense  
 XX nucleic acids which are complementary to each other and to target nucleic  
 XX acid e.g., telomerase RNA or mRNA encoding telomerase reverse  
 XX transcriptase.  
 XX  
 XX Claim 10; Page 28; 37pp; English.  
 XX  
 XX The present sequence is that of a short interfering RNA, denoted hTR#1  
 XX siRNA, which targets the template region (see ACC57526) of human  
 XX telomerase RNA. The siRNA comprises sense and antisense nucleic acids  
 XX that are complementary to each other except for 2 thymidine  
 XX deoxynucleotides at both 3' overhangs. A nucleic acid comprising the  
 XX double-stranded region of this siRNA is specifically claimed. The  
 XX invention relates to the discovery that double-stranded interfering RNAs  
 XX which target telomerase RNA, or mRNA encoding telomerase reverse  
 XX transcriptase (TERT), are capable of inhibiting telomerase activity.  
 XX Inhibition of telomerase in cancer cells leads to telomere shortening,  
 XX end-to-end chromosomal fusion, and apoptosis. Interference of telomerase  
 XX activity can also be used for treatment of infertility, for contraception  
 XX or sterilisation, for immunosuppression, for treatment of yeast, parasite  
 XX and fungal infections, and in antiinflammatory therapies. As telomerase  
 XX is active in a limited number of cell types, e.g. tumour cells, germline  
 XX cells, certain stem cells of the haematopoietic system, T and B cells,  
 XX sun-damaged skin, and proliferative cervix, most normal cells are not  
 XX affected by telomerase RNA interference therapy  
 XX  
 XX Sequence 21 BP; 5 A; 5 C; 3 G; 2 T; 6 U; 0 Other;  
 XX  
 XX Query Match 4.2%; Score 19; DB 1; Length 21;  
 XX Best Local Similarity 68.4%; Pred. No. 1.7e+02;  
 XX Matches 13; Conservative 6; Mismatches 0; Indels 0; Gaps 0;  
 OY 42 TTGTCTAACCTAAGTACG 60

CC	downregulate expression of the one or more telomerase genes by RNA interference. The siNAs may or may not comprise ribonucleotides and may be double or single stranded. They further comprise sense and antisense regions, or alternatively are assembled from a sense oligonucleotide and an antisense oligonucleotide. Specifically, the siNAs include short interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified, and can contain deoxyribonucleotides, and can be chemically synthesised, expressed from a vector or enzymatically synthesised. The invention also relates to kits for the in vitro or in vivo delivery of siNA; conjugates and/or complexes of siNA; and vectors that express siNA. The siNAs are used to modulate expression of the telomerase genes in cells, tissue explants or organisms (e.g., by ex vivo gene therapy), or in grafts and transplants for the treatment of a variety of conditions. They may be used for treating cancer, restenosis, infectious diseases (specifically protozoal), transplant rejection, or autoimmune or age-related diseases, e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration, skin ulcers and rheumatoid arthritis. The siNAs are also useful for drug screening, diagnosis, therapeutic target identification and validation, genetic engineering, pharmacogenomics, studying gene function, and gene mapping (e.g. of single nucleotide polymorphisms). The present sequence represents a chemically modified siRNA targeted to the human TERC mRNA transcript.
CC	
CC	Sequence 23 BP; 4 A; 3 C; 7 G; 2 T; 5 U; 2 Other;
CC	Query Match 4.2%; Score 19; DB 1; Length 23;
CC	Best Local Similarity 73.7%; Pred. No. 1.9e+02;
CC	Matches 14; Conservative 5; Mismatches 0; Indels 0; Gaps 0;
QY	300 GAAGAGTTGGCTCTGTCA 318      :     : :
Db	2 GAAGAGUUGGCGUCUGUCA 20
RESULT 259	
ADF93828	
ID	ADF93828 standard; RNA; 23 BP.
XX	
AC	ADF93828;
XX	
DT	26-FEB-2004 (first entry)
XX	
DE	Human TERC chemically modified siRNA, SEQ ID 555.
XX	
KW	Cytostatic; vasotropic; protozoacide; immunosuppressive; dermatological; neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic; antiarthritic; antiinflammatory; gene therapy; telomerase; human; terc;
KW	RNA interference; short interfering nucleic acid; siNA;
KW	short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;
KW	short hairpin RNA; shRNA; expression modulation; gene therapy;
KW	drug screening; diagnosis; therapeutic target identification;
KW	pharmacogenomics; gene function analysis; gene mapping; TERC; TERT;
XX	DNA-RNA hybrid; ss.
XX	
OS	Synthetic.
OS	Homo sapiens.
XX	
Key	Location/Qualifiers
FT	modified_base 1..23
FT	/*tag= b
FT	/mod_base= OTHER
FT	/note= "Pyrimidine bases are 2'-deoxy-2'-fluoro and purines are Deoxy bases"
FT	modified_base 1
FT	/*tag= a
FT	/mod_base= OTHER
FT	/note= "Inverted deoxy abasic nucleotide"
FT	modified_base 21..22
FT	/*tag= c
FT	/mod_base= OTHER
FT	/note= "Ribothymidines"
FT	modified_base 23
WO2003070742-A1.	
28-AUG-2003.	
11-FEB-2003; 2003WO-US004088.	
20-FEB-2002; 2002US-0358580P.	
11-MAR-2002; 2002US-0363124P.	
06-JUN-2002; 2002US-0386782P.	
17-JUL-2002; 2002US-0396600P.	
29-AUG-2002; 2002US-0406784P.	
09-SEP-2002; 2002US-0408378P.	
05-SEP-2002; 2002US-0409293P.	
15-JAN-2003; 2003US-0440129P.	
(RIBO-) RIBOZYME PHARM INC.	
Mcswiggen J, Beigelman L;	
WPI; 2003-68977/65.	
New short interfering nucleic acid downregulates expression of the telomerase gene useful e.g. for treatment and diagnosis of cancer.	
Example 3; SEQ ID NO 556; 145pp; English.	
The invention relates to short interfering nucleic acids (siNA) which	









PT New short interfering nucleic acid downregulates expression of the  
PT telomerase gene useful e.g. for treatment and diagnosis of cancer.  
XX  
PS Example 3; SEQ ID NO 548; 145pp; English.  
XX  
CC The invention relates to short interfering nucleic acids (siNA) which  
CC downregulate expression of the one or more telomerase genes by RNA  
CC interference. The siNA may or may not comprise ribonucleotides and may  
CC be double or single stranded. They further comprise sense and antisense  
CC regions, or alternatively are assembled from a sense oligonucleotide and  
CC an antisense oligonucleotide. Specifically, the siNA include short  
CC interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short  
CC hairpin RNA (shRNA). The siNA can be unmodified or chemically modified,  
CC can contain deoxyribonucleotides, and can be chemically synthesised,  
CC expressed from a vector or enzymatically synthesised. The invention also  
CC relates to kits for the in vitro or in vivo delivery of siNA; conjugates  
CC and/or complexes of siNA; and vectors that express siNA. The siNA are  
CC used to modulate expression of the telomerase gene in cells, tissue  
CC explants or organisms (e.g., by ex vivo gene therapy), or in grafts and  
CC transplants for the treatment of a variety of conditions. They may be  
CC used for treating cancer, restenosis, infectious diseases (specifically  
CC protozoal), transplant rejection, or autoimmune or age-related diseases,  
CC e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,  
CC skin ulcers and rheumatoid arthritis. The siNA are also useful for drug  
CC screening, diagnosis, therapeutic target identification and validation,  
CC genetic engineering, pharmacogenomics, studying gene function, and gene  
CC mapping (e.g., of single nucleotide polymorphisms). The present sequence  
CC represents a chemically modified siRNA targeted to the human TRC mRNA  
XX transcript.  
XX  
SQ Sequence 23 BP; 4 A; 3 C; 7 G; 2 T; 5 U; 2 Other;  
Query Match 4.2%; Score 19; DB 1; Length 23;  
Best Local Similarity 73.7%; Pred. No. 1.9e+02;  
Matches 14; Conservative 5; Mismatches 0; Indels 0; Gaps 0;  
Qy 300 GAAGAGTGGGCTCTGTCA 318  
|||||:|||||:|:|:  
Db 2 GAAGAGUUGGCGCUCUGUCA 20  
RESULT 264  
ADG30039  
ID ADG30039 standard; RNA; 23 BP.  
XX AC  
XX ADG30039;  
XX  
XX 26-FEB-2004 (first entry)  
XX  
XX hTR-targeted siNA DNA-RNA hybrid - SEQ ID 605.  
XX  
XX double-stranded short interfering nucleic acid; siNA;  
KW antiarteriosclerotic; neuroprotective; nootropic; antiparkinsonian;  
KW anticonvulsant; pulmonary disease; restenosis; atherosclerosis;  
KW Alzheimer's; Parkinson's; epilepsy; dementia; huntington's;  
KW amyotrophic lateral sclerosis; gene therapy; ss; DNA-RNA hybrid; hTR.  
XX  
XX Unidentified.  
XX OS  
XX Synthetic.  
XX  
XX WO2003074654-A2.  
XX  
XX 12-SEP-2003.  
XX  
XX 20-FEB-2003; 2003WO-US005028.  
XX  
XX 20-FEB-2002; 2002US-0358580P.  
PR 11-MAR-2002; 2002US-0363124P.  
PR 06-JUN-2002; 2002US-0386782P.  
PR 29-AUG-2002; 2002US-0406784P.  
PR 05-SEP-2002; 2002US-0408378P.  
PR 09-SEP-2002; 2002US-0409293P.  
PR 15-JAN-2003; 2003US-0440129P.

XX (SIRN-) SIRNA THERAPEUTICS INC.  
XX  
XX Mcswiggen J, Beigelman L, Chowrira B, Pavco P, Fosnaugh K;  
XX Jamison S, Usman N, Thompson J;  
XX WPI; 2003-731676/69.  
XX  
XX New double-stranded short interfering nucleic acid molecule, useful for  
XX down-regulating the expression of an endogenous mammalian target gene or  
XX for treating diseases that respond to modulation of gene expression or  
XX activity.  
XX  
XX Example 24; SEQ ID NO 605; 593pp; English.  
XX  
XX The invention relates to a double-stranded short interfering nucleic acid  
XX (siNA) molecule that down-regulates expression of an endogenous mammalian  
XX target gene comprising one or more chemical modifications and each strand  
XX of the double-stranded siNA comprises about 21 nucleotides. The siNA of  
XX the invention demonstrates antiarteriosclerotic, neuroprotective,  
XX nootropic, antiparkinsonian and anticonvulsant activities and may be  
XX useful for down-regulating the expression of an endogenous mammalian  
XX target gene and therefore in the treatment of any disease or condition  
XX that responds to modulation of gene expression or activity in a cell,  
XX tissue or organism. The disease or condition may include pulmonary  
XX diseases such as restenosis, atherosclerosis, Alzheimer's disease,  
XX Parkinson's disease, epilepsy, dementia, huntington's disease or  
XX amyotrophic lateral sclerosis. Furthermore, the siNA may be utilised for  
XX gene therapy applications. The current sequence is that of the siNA DNA-  
XX RNA hybrid of the invention.  
XX  
SQ Sequence 23 BP; 4 A; 7 C; 3 G; 2 T; 5 U; 2 Other;  
Query Match 4.2%; Score 19; DB 1; Length 23;  
Best Local Similarity 73.7%; Pred. No. 1.9e+02;  
Matches 14; Conservative 5; Mismatches 0; Indels 0; Gaps 0;  
Qy 148 CCACCGTTCATTCTAGAGC 166  
|||||:|||||:|:|:  
Db 2 CCACCGUUCUUCUAGAGC 20  
RESULT 265  
ADG30040  
ID ADG30040 standard; RNA; 23 BP.  
XX AC  
XX ADG30040;  
XX  
XX 26-FEB-2004 (first entry)  
XX  
XX hTR-targeted siNA DNA-RNA hybrid - SEQ ID 606.  
XX  
XX double-stranded short interfering nucleic acid; siNA;  
KW antiarteriosclerotic; neuroprotective; nootropic; antiparkinsonian;  
KW anticonvulsant; pulmonary disease; restenosis; atherosclerosis;  
KW Alzheimer's; Parkinson's; epilepsy; dementia; huntington's;  
KW amyotrophic lateral sclerosis; gene therapy; ss; DNA-RNA hybrid; hTR.  
XX  
XX Unidentified.  
XX OS  
XX Synthetic.  
XX  
XX WO2003074654-A2.  
XX  
XX 12-SEP-2003.  
XX  
XX 20-FEB-2003; 2003WO-US005028.  
XX  
XX 20-FEB-2002; 2002US-0358580P.  
PR 11-MAR-2002; 2002US-0363124P.  
PR 06-JUN-2002; 2002US-0386782P.  
PR 29-AUG-2002; 2002US-0406784P.  
PR 05-SEP-2002; 2002US-0408378P.  
PR 09-SEP-2002; 2002US-0409293P.

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PR 15-JAN-2003; 2003US-0440129P.
XX PA (SIRN-) SIRNA THERAPEUTICS INC.
XX PI Mcswiggen J, Beigelman L, Chowrira B, Pavco P, Fosnaugh K;
XX PI Jamison S, Usman N, Thompson J;
XX DR WPI; 2003-731676/69.
XX
XX New double-stranded short interfering nucleic acid molecule, useful for
PT down-regulating the expression of an endogenous mammalian target gene or
PT for treating diseases that respond to modulation of gene expression or
PT activity.
XX
XX Example 24; SEQ ID NO 606; 593pp; English.
XX
XX The invention relates to a double-stranded short interfering nucleic acid
CC (siNA) molecule that down-regulates expression of an endogenous mammalian
CC target gene comprising one or more chemical modifications and each strand
CC of the double-stranded siNA comprises about 21 nucleotides. The siNA of
CC the invention demonstrates antiarteriosclerotic, neuroprotective,
CC neurotropic, antiparkinsonian and anticonvulsant activities and may be
CC useful for down-regulating the expression of an endogenous mammalian
CC target gene and therefore in the treatment of any disease or condition
CC that responds to modulation of gene expression or activity in a cell,
CC tissue or organism. The disease or condition may include pulmonary
CC diseases such as restenosis, atherosclerosis, Alzheimer's disease,
CC Parkinson's disease, epilepsy, dementia, Huntington's disease or
CC amyotrophic lateral sclerosis. Furthermore, the siNA may be utilised for
CC gene therapy applications. The current sequence is that of the siNA DNA-
CC RNA hybrid of the invention.
XX
XX Sequence 23 BP; 4 A; 3 C; 7 G; 2 T; 5 U; 2 Other;
SQ
Query Match 4.2%; Score 19; DB 1; Length 23;
Best Local Similarity 73.7%; Pred. No. 1.9e+02;
Matches 14; Conservative 5; Mismatches 0; Indels 0; Gaps 0;
OY 300 GAAGAGTGGGCTCTGTCA 318
DB 2 GAAGAGUUGGCGUCUGCA 20
|||||:|:|:|:|:|:|
2 UGCCACCGGUCAUUCUGA 20

RESULT 266
ADG30038
ID ADG30038 standard; RNA; 23 BP.
XX
XX AC ADG30038;
XX
XX 26-FEB-2004 (first entry)
XX
XX hTR-targeted siNA DNA-RNA hybrid - SEQ ID 604.
XX
XX double-stranded short interfering nucleic acid; siNA;
XX antiarteriosclerotic; neuroprotective; neurotropic; antiparkinsonian;
XX anticonvulsant; pulmonary disease; restenosis; atherosclerosis;
XX Alzheimer's; Parkinson's; epilepsy; dementia; Huntington's;
XX amyotrophic lateral sclerosis; gene therapy; ss; DNA-RNA hybrid; hTR.
XX
XX Unidentified.
XX Synthetic.
XX
XX WO2003074654-A2.
XX
XX 12-SEP-2003.
XX
XX 20-FEB-2003; 2003WO-US005028.
XX
XX 20-FEB-2002; 2002US-0358580P.
XX 11-MAR-2002; 2002US-0363124P.
XX 06-JUN-2002; 2002US-0386782P.
XX 29-AUG-2002; 2002US-0406784P.
XX 05-SEP-2002; 2002US-0408378P.

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PR 09-SEP-2002; 2002US-0409293P.
PR 15-JAN-2003; 2003US-0440129P.
XX PA (SIRN-) SIRNA THERAPEUTICS INC.
XX PI Mcswiggen J, Beigelman L, Chowrira B, Pavco P, Fosnaugh K;
XX PI Jamison S, Usman N, Thompson J;
XX DR WPI; 2003-731676/69.
XX
XX New double-stranded short interfering nucleic acid molecule, useful for
PT down-regulating the expression of an endogenous mammalian target gene or
PT for treating diseases that respond to modulation of gene expression or
PT activity.
XX
XX Example 24; SEQ ID NO 604; 593pp; English.
XX
XX The invention relates to a double-stranded short interfering nucleic acid
CC (siNA) molecule that down-regulates expression of an endogenous mammalian
CC target gene comprising one or more chemical modifications and each strand
CC of the double-stranded siNA comprises about 21 nucleotides. The siNA of
CC the invention demonstrates antiarteriosclerotic, neuroprotective,
CC neurotropic, antiparkinsonian and anticonvulsant activities and may be
CC useful for down-regulating the expression of an endogenous mammalian
CC target gene and therefore in the treatment of any disease or condition
CC that responds to modulation of gene expression or activity in a cell,
CC tissue or organism. The disease or condition may include pulmonary
CC diseases such as restenosis, atherosclerosis, Alzheimer's disease,
CC Parkinson's disease, epilepsy, dementia, Huntington's disease or
CC amyotrophic lateral sclerosis. Furthermore, the siNA may be utilised for
CC gene therapy applications. The current sequence is that of the siNA DNA-
CC RNA hybrid of the invention.
XX
XX Sequence 23 BP; 4 A; 6 C; 2 G; 2 T; 7 U; 2 Other;
SQ
Query Match 4.2%; Score 19; DB 1; Length 23;
Best Local Similarity 63.2%; Pred. No. 1.9e+02;
Matches 12; Conservative 7; Mismatches 0; Indels 0; Gaps 0;
OY 146 TTCACCGTTCATTCTAGA 164
DB 2 UGCCACCGGUCAUUCUGA 20
|||||:|:|:|:|:|:|
2 UGCCACCGGUCAUUCUGA 20

RESULT 267
AAZ07305
ID AAZ07305 standard; DNA; 22 BP.
XX
XX AC AAZ07305;
XX
XX 22-OCT-1999 (first entry)
XX
XX Human telomerase RNA gene (hTR) promoter specific primer hile.
XX
XX Telomerase RNA; TR; promoter; cytotoxin; cancer; neoplasia; hTR;
XX gene therapy; thymidine kinase gene; anticancer therapy; human;
XX mutagenesis; PCR primer; ss.
XX
XX Synthetic.
XX Homo sapiens.
XX
XX WO9938964-A2.
XX
XX 05-AUG-1999.
XX
XX 29-JAN-1999; 99WO-GB000308.
XX
XX 29-JAN-1998; 98GB-00001902.
XX
XX (CANC-) CANCER RES CAMPAIGN TECHNOLOGY.
XX Keith WN;
XX

```



CC cancer, especially neoplasias. The telomerase is necessary for the  
 CC unrestricted proliferative capacity of many human cancers. Mutation or  
 CC dysregulation of the telomerase repression pathway may cause reactivation  
 CC or upregulation of telomerase expression in cancer. Substances,  
 CC identified in the methods, can be used to block transduction from the TR  
 CC gene promoter through interaction of the 5' regulatory sequences. These  
 CC substances, e.g. antisense oligonucleotides, transcription factors,  
 CC peptide nucleic acids and factors that disrupt signal transduction, are  
 CC useful for cancer therapy. In particular, gene therapy vectors  
 CC (especially pGT62-codAupp) comprising the promoter and a viral thymidine  
 CC kinase gene can be used to convert a prodrug, e.g. gancyclovir, so that  
 CC neoplasia can be controlled or treated. Direct down-regulation of  
 CC telomerase RNA gene through manipulation of transcription factors may be  
 CC effective anticancer therapy and the cloning of the hTR gene promoter  
 CC allows the analysis of therapeutic molecules which modulate hTR promoter  
 CC activity. Sequences AA207681-95 represent PCR primers for amplifying  
 CC mouse TR gene (terc) promoter sequence  
 XX  
 SQ Sequence 20 BP; 6 A; 5 C; 7 G; 2 T; 0 U; 0 Other;  
 Query Match 4.1%; Score 18.4; DB 1; Length 20;  
 Best Local Similarity 95.0%; Pred. No. 1.8e+02;  
 Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 102 TTCTCGTGACTTTCACGGG 121  
 Db 20 TTCTCGTGACTTTCACGGG 1  
 RESULT 270  
 AAX18325  
 ID AAX18325 standard; DNA; 18 BP.  
 XX  
 AC AAX18325;  
 XX  
 DT 26-JUL-1999 (first entry)  
 XX  
 DE PCR primer for telomerase coding sequence.  
 XX  
 KW Telomerase; human; cancer; diagnosis; melanoma; skin cancer; leukaemia;  
 KW neuroblastoma; breast carcinoma; colon carcinoma; lymphoma; osteosarcoma;  
 KW smooth muscle cell hyperplasia; stem cell proliferation; Wilm's tumour;  
 KW stem cell differentiation; organ regeneration; organ differentiation;  
 KW PCR primer; ss.  
 XX  
 OS Synthetic.  
 OS Homo sapiens.  
 XX  
 PN W09901560-A1.  
 XX  
 PD 14-JAN-1999.  
 XX  
 PF 01-JUL-1998; 98WO-US013835.  
 XX  
 PR 01-JUL-1997; 97US-0051410P.  
 PR 21-JUL-1997; 97US-0053018P.  
 PR 21-JUL-1997; 97US-0053329P.  
 PR 04-AUG-1997; 97US-0054642P.  
 PR 09-SEP-1997; 97US-0058287P.  
 XX  
 PA (CAMP-) CAMBIA BIOSYSTEMS LLC.  
 XX  
 PI Kilian A, Bowtell D;  
 XX  
 DR WPI; 1999-106060/09.  
 XX  
 PT New isolated vertebrate telomerase genes - used to develop products for  
 PT treating cancers or for organ regeneration, nerve cell or brain cell  
 PT growth following injury or bone marrow transplantation.  
 XX  
 PS Example 1; Page 43; 134pp; English.  
 XX  
 CC This sequence is a PCR primer for DNA encoding a truncated human

CC telomerase of the invention. Primers that amplify the telomerase coding  
 CC sequence can be used in a method for diagnosing cancer in a patient. The  
 CC telomerase can be used for detection, diagnosis and drug screening.  
 CC Inhibitors of telomerase activity can be used to treat cancers such as  
 CC melanomas, other skin cancers, neuroblastomas, breast carcinomas, colon  
 CC carcinomas, leukaemias, lymphomas, osteosarcomas or smooth muscle cell  
 CC hyperplasias or skin growths. Enhancers of telomerase may be used to  
 CC stimulate stem cell proliferation and differentiation (expansion of  
 CC haematopoietic stem cells could be administered in the bone marrow  
 CC transplant context). As well, many tissues have stem cells. Proliferation  
 CC of these cells may be useful in wound healing, hair growth, treatment of  
 CC disease such as Wilm's tumour, organ regeneration or differentiation  
 CC after injury or diseases, nerve cell or brain cell growth following  
 CC injury  
 XX  
 SQ Sequence 18 BP; 1 A; 2 C; 12 G; 3 T; 0 U; 0 Other;  
 Query Match 4.0%; Score 18; DB 1; Length 18;  
 Best Local Similarity 100.0%; Pred. No. 1.7e+02;  
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 GGCTTCGGAGGCTGGGC 18  
 Db 1 GGCTTCGGAGGCTGGGC 18  
 RESULT 271  
 AAX37552/C  
 ID AAX37552 standard; DNA; 18 BP.  
 XX  
 AC AAX37552;  
 XX  
 DT 15-AUG-2000 (first entry)  
 XX  
 DE PNA sequence #9 used to inhibit telomerase activity.  
 XX  
 KW Peptide nucleic acid; PNA; telomerase; ribonucleoprotein enzyme; cancer;  
 KW inhibitor; neoplasia; neurodegenerative disease; aging; hyperplasia;  
 KW AIDS; HIV; fungal infection; forensic identification; detect; tumour;  
 KW paternity testing; ss.  
 XX  
 OS Synthetic.  
 XX  
 PH Key Location/Qualifiers  
 FT misc\_feature 1..18  
 FT /tag= a  
 FT /note= "Peptide nucleic acid molecule, where N-(2-  
 FT aminoethyl)glycine units are linked to nucleotide bases  
 FT via glycine amino N through a methylenecarbonyl linker"  
 XX  
 PN US6046307-A.  
 XX  
 PD 04-APR-2000.  
 XX  
 PF 09-APR-1997; 97US-00838545.  
 XX  
 PR 09-APR-1996; 96US-00630019.  
 XX  
 PA (TEXA ) UNIV TEXAS SYSTEM.  
 XX  
 PI Wright WE, Piatyszek MA, Shay JW, Norton JC, Corey DR;  
 XX  
 DR WPI; 2000-292432/25.  
 XX  
 PT New peptide nucleic acid (PNA) compounds that inhibit telomerase activity  
 PT in mammalian cells is useful as probes to detect the RNA component of a  
 PT mammalian telomerase.  
 XX  
 PS Claim 6; Col 71; 45pp; English.  
 XX  
 CC The present sequence represents a peptide nucleic acid molecule which  
 CC hybridises to the mRNA component of mammalian telomerase, and inhibits  
 CC telomerase activity. Telomerase is a ribonucleoprotein enzyme that

CC synthesizes one strand of the telomeric DNA, using as a template an 11  
CC nucleotide sequence contained within the RNA component of the enzyme. The  
CC invention relates to PNA molecules having a sequence of no more than 25  
CC bases, which include the sequence GTTAGG. The uncharged nature of the PNA  
CC backbone increases the melting temperature of associating strands,  
CC increases the rate of association with targeted nucleic acids, and  
CC affords greater resistance of degradation by proteases or nucleases. The  
CC therapeutic PNAs may be used for treating disease conditions such as  
CC cancers, neoplasia, hyperplasia, neurodegenerative diseases, aging, human  
CC immunodeficiency virus (HIV) infection/AIDS (acquired immunodeficiency  
CC syndrome) and associated pathologies, fungal infections, and other  
CC diseases characterized by abnormal telomere metabolism or telomerase  
CC activity, in combination with antineoplastic and other cytotoxic or  
CC used for molecular diagnostics, labelled PNAs are used as hybridization  
CC probes to detect or quantitate polynucleotides having a human telomerase  
CC RNA (hTR) sequence. PNA probes are also used for forensic identification  
CC of individuals, e.g. paternity testing, based on hTR gene restriction  
CC fragment length polymorphism (RFLP) pattern. PNAs are also useful as  
CC probes to detect the RNA component of a mammalian telomerase and as  
CC inhibitors of telomerase activity. The method of the present invention  
CC allows cancerous conditions to be detected with increased confidence and  
CC possibly at an earlier stage, before cells are detected as cancerous  
CC based on pathological characteristics. The diagnostic and prognostic  
CC methods of the present invention can be used to detect an immortal or  
CC neoplastic cell or tumour tissue or cancer of any origin, provided the  
CC cell expresses telomerase activity and its RNA component

XX Sequence 18 BP; 2 A; 5 C; 4 G; 7 T; 0 U; 0 Other;

Query Match 4.0%; Score 18; DB 1; Length 18;  
Best Local Similarity 100.0%; Pred. NO. 1.7e+02;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 48 AACCTTAAGTGAAGGG 65  
DB 18 AACCTTAAGTGAAGGG 1

RESULT 272

AAS15430/C

ID AAS15430 standard; DNA; 18 BP.

AC AAS15430;

DT 14-FEB-2002 (first entry)

DE PNA 27 inhibiting human and mammalian telomerase activity.

XX Mammalian; peptide nucleic acid; probe; forensic; paternity testing;  
KW human telomerase RNA component; hTR gene RFLP pattern; cancer;  
KW inflammation; lymphoproliferative disease; autoimmune disease;  
KW neurodegenerative disease; neoplasia; hyperplasia; HIV; AIDS;  
KW human immunodeficiency virus; acquired immunodeficiency syndrome;  
KW telomere metabolism; mutant; cytostatic; anti-inflammatory;  
KW immunosuppressive; polyamide backbone; ss.

OS Homo sapiens.

OS Synthetic.

PH Key Location/Qualifiers  
FT modified\_base 1. .18  
FT /\*tag= a  
FT /note= "This sequence is a peptide nucleic acid, i.e. it  
FT contains a polyamide backbone instead of a deoxyribose  
FT backbone"

XX US6294650-B1.

XX 25-SEP-2001.

XX 08-JUL-1999; 99US-00349532.

PR 09-APR-1996; 96US-00630019.  
PR 09-APR-1997; 97US-00838545.  
XX (TEXA ) UNIV TEXAS SYSTEM.  
XX Shay JW, Wright WE, Piatyszek MA, Corey DR, Norton JC;  
PI WPI; 2001-638024/73.  
DR

XX New peptide nucleic acids that hybridizes to the RNA component of  
PT mammalian telomerase, useful for treating or preventing cancer, or  
PT inflammation, lymphoproliferative diseases, autoimmune disease, or  
PT neurodegenerative diseases.

XX Claim 7; Col 73; 46pp; English.

XX The present invention relates to peptide nucleic acids (PNAs), comprising  
CC a sequence of 6-25 nucleobases, that inhibit telomerase activity in  
CC mammalian cells by hybridising to the RNA component of mammalian  
CC telomerase. The PNAs are useful as probes to detect the RNA component of  
CC mammalian telomerase and as inhibitors of telomerase activity, or to  
CC detect and/or quantitate polynucleotide having the human telomerase RNA  
CC component (hTR) sequence, as well as in forensic identification of  
CC individuals, such as paternity testing or identification of criminal  
CC suspects or unknown descendants based on the hTR gene RFLP pattern. The  
CC PNA can be further used for treating or preventing cancer, inflammation,  
CC lymphoproliferative diseases, autoimmune disease, or neurodegenerative  
CC diseases. The PNAs in combination with other pharmaceuticals (such as  
CC antineoplastic or cytostatic agents) can be used for treating neoplasia,  
CC hyperplasia, human immunodeficiency virus (HIV) infections, acquired  
CC immunodeficiency syndrome (AIDS) and associated pathologies, and other  
CC diseases characterised by abnormal telomere metabolism or telomerase  
CC activity. The present sequence represents one of the PNA sequences of the  
CC invention

XX Sequence 18 BP; 2 A; 5 C; 4 G; 7 T; 0 U; 0 Other;

Query Match 4.0%; Score 18; DB 1; Length 18;

Best Local Similarity 100.0%; Pred. NO. 1.7e+02;

Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 48 AACCTTAAGTGAAGGG 65

DB 18 AACCTTAAGTGAAGGG 1

RESULT 273

AAS07303

ID AAS07303 standard; DNA; 22 BP.

AC AAS07303;

XX 22-OCT-1999 (first entry)

DE Human telomerase RNA gene (hTR) promoter specific primer h112b.

XX Telomerase RNA; TR; promoter; cytotoxin; cancer; neoplasia; hTR;  
KW gene therapy; thymidine kinase gene; anticancer therapy; human;  
KW mutagenesis; PCR primer; ss.

OS Synthetic.

OS Homo sapiens.

XX WO9938964-A2.

XX 05-AUG-1999.

XX 29-JAN-1999; 99WO-GB000308.

XX 29-JAN-1998; 98GB-00001902.

XX (CANC-) CANCER RES CAMPAIGN TECHNOLOGY.

PI Keith WN;  
 XX WPI; 1999-479183/40.  
 DR  
 XX  
 PT Mouse and human telomerase RNA gene promoters, useful for tumor specific  
 PT gene therapy.  
 XX  
 PS Disclosure; Fig 12; 109pp; English.  
 XX  
 CC The invention relates to promoter regions from mouse and human telomerase  
 CC RNA (TR) component genes. The TR gene promoter can be linked to a  
 CC heterologous gene, especially a gene encoding a cytotoxin, for therapy of  
 CC cancer, especially neoplasias. The telomerase is necessary for the  
 CC unrestricted proliferative capacity of many human cancers. Mutation or  
 CC dysregulation of the telomerase repression pathway may cause reactivation  
 CC or upregulation of telomerase expression in cancer. Substances,  
 CC identified in the methods, can be used to block transcription from the TR  
 CC gene promoter through interaction of the 5' regulatory sequences. These  
 CC substances, e.g. antisense oligonucleotides, transcription factors,  
 CC peptide nucleic acids and factors that disrupt signal transduction, are  
 CC useful for cancer therapy. In particular, gene therapy vectors  
 CC (especially pGTS2-codAupp) comprising the promoter and a viral thymidine  
 CC kinase gene can be used to convert a prodrug, e.g. gancyclovir, so that  
 CC neoplasia can be controlled or treated. Direct down-regulation of  
 CC telomerase RNA gene through manipulation of transcription factors may be  
 CC effective anticancer therapy and the cloning of the hTR gene promoter  
 CC allows the analysis of therapeutic molecules which modulate hTR promoter  
 CC activity. Sequences AA207696-321 represent PCR primers used in cloning  
 CC and mutagenesis of human TR gene (hTR) promoter region  
 XX  
 SQ Sequence 22 BP; 2 A; 4 C; 12 G; 4 T; 0 U; 0 Other;  
 Query Match 3.8%; Score 17.2; DB 1; Length 22;  
 Best Local Similarity 86.4%; Pred. No. 2.5e+02;  
 Matches 19; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 Qy 15 GGGCTGGAGGGGTGGTGGCC 36  
 Db 1 GGGCTGGGTAAAGGTGGTGGCC 22  
 RESULT 274  
 ID AAV41181/c  
 AC AAV41181 standard; DNA; 17 BP.  
 AC AAV41181;  
 XX  
 DT 08-OCT-1998 (first entry)  
 XX  
 DE RNA component of human telomerase (hTR) antisense oligo RP2.  
 XX  
 KW RNA component; human telomerase; antisense oligonucleotide; infection;  
 KW neuroblastoma; bladder cancer; colon cancer; prostate cancer; cancer;  
 KW contraception; sterilisation; immunosuppression; therapeutic; hTR;  
 KW immune system down-regulation; anti-inflammatory therapy; ss.  
 XX  
 OS Synthetic.  
 OS Homo sapiens.  
 XX  
 XX WO9828442-A1.  
 XX  
 PD 02-JUL-1998.  
 XX  
 PF 19-DEC-1997; 97WO-US023619.  
 XX  
 PR 20-DEC-1996; 96US-00770564.  
 PR 20-DEC-1996; 96US-00770565.  
 XX  
 XX (GERO-) GERON CORP.  
 PA  
 XX Kim NW, Wu F, Kealey JT, Pruzan R, Weinrich SL;  
 PI WPI; 1998-377670/32.  
 XX  
 DR

XX New polynucleotide(s) anti:sense to human telomerase - used for detecting  
 PT or inhibiting human telomerase, e.g. for treating cancers, contraception,  
 PT immuno-suppression or treating infection.  
 XX  
 PS Claim 11; Page 65; 80pp; English.  
 XX  
 CC Sequences shown in AAV41169 to AAV41181 represent antisense  
 CC oligonucleotides to the RNA component of human telomerase (hTR). These  
 CC antisense oligonucleotides specifically hybridise to a nucleotide  
 CC sequence within an accessible region of the hTR, but that does not  
 CC hybridise to a sequence within the template region of hTR. These  
 CC oligonucleotides may specifically be used for detection of an RNA  
 CC component of human telomerase in a sample. This is useful for diagnosing  
 CC cancer (especially neuroblastoma, bladder, colon and prostate cancer),  
 CC and providing prognosis for a cancer patient. The inhibitory  
 CC oligonucleotides can inhibit the telomerase activity level in a cell by  
 CC interfering with transcription of the RNA component, decreasing the half-  
 CC life of the telomerase RNA component transcript, inhibiting assembly of  
 CC the RNA component into the telomerase holoenzyme, or inhibiting the  
 CC polymerase activity of telomerase. These antisense oligonucleotides can  
 CC be used for inhibiting telomerase activity in both cultured cells and in  
 CC cells in vivo. They can be used in therapeutics for treating or  
 CC preventing cancer, for contraception or sterilisation, for  
 CC immunosuppression, and for selectively down-regulating specific branches  
 CC of the immune system, e.g. a specific subset of T-cells, in anti-  
 CC inflammatory therapies or for treating infections by, e.g. yeast,  
 CC parasites or fungi  
 XX  
 SQ Sequence 17 BP; 4 A; 6 C; 6 G; 1 T; 0 U; 0 Other;  
 Query Match 3.8%; Score 17; DB 1; Length 17;  
 Best Local Similarity 100.0%; Pred. No. 1.9e+02;  
 Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Qy 177 TGTCTAGCTGCTGGCCCG 193  
 Db 17 TGTCTAGCTGCTGGCCCG 1  
 RESULT 275  
 ID ADK20555/c  
 AC ADK20555 standard; DNA; 20 BP.  
 AC ADK20555;  
 XX  
 DT 18-NOV-2004 (first entry)  
 XX  
 DE Acyl-coenzyme A synthetase 1, ACS1, antisense oligonucleotide #632.  
 XX  
 KW acyl-coenzyme A synthetase 1; ACS1; diabetes; obesity;  
 KW metabolic syndrome X; cardiovascular disorder; cancer; infection;  
 KW inflammation; tumour; antisense; ss.  
 XX  
 OS Synthetic.  
 OS  
 XX WO2004016749-A2.  
 XX  
 PD 26-FEB-2004.  
 XX  
 PF 14-AUG-2003; 2003WO-US025389.  
 XX  
 PR 14-AUG-2002; 2002US-0403591P.  
 XX  
 XX (PHAA ) PHARMACIA CORP.  
 XX  
 XX Ross SA;  
 XX  
 XX WPI; 2004-203782/19.  
 XX  
 XX New antisense compounds targeted to nucleic acid molecules encoding acyl-  
 PT coenzyme A synthetase 1 (ACS1), useful for treating diseases or  
 PT conditions associated with aberrant expression of ACS1, e.g. diabetes,







OS Synthetic.  
 XX Key  
 FH Location/Qualifiers  
 FT 1. .21  
 FT CDS /\*tag= a  
 XX  
 XX WO9311247-A1.  
 XX  
 XX 10-JUN-1993.  
 XX  
 XX 04-DEC-1992; 92WO-US010621.  
 XX  
 XX 06-DEC-1991; 91US-00803631.  
 XX 22-MAY-1992; 92US-00887265.  
 XX  
 XX (GETH ) GENENTECH INC.  
 XX Gorman CM, Groskreutz DJ, Marriott D;  
 XX  
 XX WPI; 1993-197065/24.  
 XX P-PSDB; AAR37621.  
 XX  
 XX Heterologous polypeptide factor prepn. - by introducing into polypeptide  
 XX factor dependent host cell nucleic acid, and then culturing host cell,  
 XX etc.  
 XX  
 XX Example; Page 54; 134pp; English.  
 XX  
 XX The inventors describe the production of mammalian cells expressing  
 XX prohormone convertase which facilitates the processing of prohormone  
 XX precursors to active hormones. More specifically the cleavage site is the  
 XX define murine prohormone convertase 1 specifically prorelaxin alanine  
 XX mutations of the basic residues K and R were constructed. The following  
 XX mutations were tested for substrate specificity to murine prohormone  
 XX convertase: 1.4, 2.4, 3.2, 4.3, 7.2 and 8.6 (see AAQ33256-63; AAR37619-  
 XX 26). (Updated on 25-MAR-2003 to correct PN field.)  
 XX  
 XX Sequence 21 BP; 10 A; 4 C; 4 G; 3 T; 0 U; 0 Other;  
 XX  
 XX Query Match 3.6%; Score 16.2; DB 1; Length 21;  
 XX Best Local Similarity 85.7%; Pred. No. 2.8e+02;  
 XX Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 XX  
 XX 156 CATTCTAGAGCAACAAAAA 176  
 XX |||||  
 XX 1 CATTCTAGAGCAACAGACAA 21  
 XX  
 XX RESULT 281  
 XX AAQ71457  
 XX ID AAQ71457 standard; DNA; 21 BP.  
 XX  
 XX AAQ71457;  
 XX AC  
 XX 25-MAR-2003 (revised)  
 XX 26-APR-1995 (first entry)  
 XX  
 XX Rx 2.4 prorelaxin C/A chain junction mutant cleavage site.  
 XX  
 XX prohormone; convertase; insulin; proinsulin; factor; growth; precursors;  
 XX transgenic; mammal; prorelaxin; cleavage; ss.  
 XX  
 XX Synthetic.  
 XX  
 XX WO9420624-A1.  
 XX  
 XX 15-SEP-1994.  
 XX  
 XX 01-MAR-1994; 94WO-US002233.  
 XX  
 XX 01-MAR-1993; 93US-00026143.  
 XX  
 XX

PA (GETH ) GENENTECH INC.  
 XX Gorman CM, Groskreutz DJ;  
 XX WPI; 1994-303031/37.  
 XX P-PSDB; AAR60585.  
 XX  
 XX Treating insulin-dependent disorders in mammals - by introducing a  
 XX nucleic acid encoding a variant proinsulin into a host cell with a  
 XX constitutive pathway of protein secretion, or a plasmid, and introducing  
 XX the cell or plasmid to the mammal.  
 XX  
 XX Example 3; Page 52; 117pp; English.  
 XX  
 XX A series of natural or mutated cDNAs for the prohormone convertase (PC)  
 XX cleavage sites in human prorelaxin protein between the C and A chains  
 XX (AAQ71455-59 corresponding to AAR60583-7) or in the B and C chains  
 XX (AAQ71460-63 corresponding to AAR60588-90). The natural cleavage sites  
 XX contain two dibasic residues, Lys-Arg, both of which are required for  
 XX cleavage. The mutant sites have replacements of either residues with an  
 XX Ala. This confers specificity to murine PC1. In this particular mutant,  
 XX the Lys residue at the fourth position of the cleavage site has been  
 XX replaced by a Ala residue. Relaxin is an ovarian hormonal peptide  
 XX responsible for remodelling the reproductive tract prior to parturition.  
 XX The cells containing both the prohormone convertase gene and the required  
 XX precursor to be expressed can be injected into a mammal. (Updated on 25-  
 XX MAR-2003 to correct PN field.)  
 XX  
 XX Sequence 21 BP; 10 A; 4 C; 4 G; 3 T; 0 U; 0 Other;  
 XX  
 XX Query Match 3.6%; Score 16.2; DB 1; Length 21;  
 XX Best Local Similarity 85.7%; Pred. No. 2.8e+02;  
 XX Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 XX  
 XX 156 CATTCTAGAGCAACAAAAA 176  
 XX |||||  
 XX 1 CATTCTAGAGCAACAGACAA 21  
 XX  
 XX RESULT 282  
 XX AAQ18326/C  
 XX ID AAQ18326 standard; DNA; 21 BP.  
 XX  
 XX AAQ18326;  
 XX AC  
 XX 26-JUL-1999 (first entry)  
 XX  
 XX PCR primer for telomerase coding sequence.  
 XX  
 XX Telomerase; human; cancer; diagnosis; melanoma; skin cancer; leukemia;  
 XX neuroblastoma; breast carcinoma; colon carcinoma; lymphoma; osteosarcoma;  
 XX smooth muscle cell hyperplasia; stem cell proliferation; Wilm's tumour;  
 XX stem cell differentiation; organ regeneration; organ differentiation;  
 XX PCR primer; ss.  
 XX  
 XX Synthetic.  
 XX OS Homo sapiens.  
 XX  
 XX WO9501560-A1.  
 XX  
 XX 14-JAN-1999.  
 XX  
 XX 01-JUL-1998; 98WO-US013835.  
 XX  
 XX 01-JUL-1997; 97US-0051410P.  
 XX 21-JUL-1997; 97US-0053018P.  
 XX 21-JUL-1997; 97US-0053329P.  
 XX 04-AUG-1997; 97US-0054642P.  
 XX 09-SEP-1997; 97US-0058287P.  
 XX  
 XX (CAMB-) CAMBIA BIOSYSTEMS LLC.  
 XX  
 XX Kilian A, Bowtell D;  
 XX

XX WPI; 1999-106060/09.

XX New isolated vertebrate telomerase genes - used to develop products for

XX treating cancers or for organ regeneration, nerve cell or brain cell

XX growth following injury or bone marrow transplantation.

XX Example 1; Page 43; 134pp; English.

XX This sequence is a PCR primer for DNA encoding a truncated human

XX telomerase of the invention. Primers that amplify the telomerase coding

XX sequence can be used in a method for diagnosing cancer in a patient. The

XX telomerase can be used for detection, diagnosis and drug screening.

XX Inhibitors of telomerase activity can be used to treat cancers such as

XX melanomas, other skin cancers, neuroblastomas, breast carcinomas, colon

XX carcinomas, leukemias, lymphomas, osteosarcomas or smooth muscle cell

XX hyperplasias or skin growths. Enhancers of telomerase may be used to

XX stimulate stem cell proliferation and differentiation (expansion of

XX haematopoietic stem cells could be administered in the bone marrow

XX transplant context). As well, many tissues have stem cells. Proliferation

XX of these cells may be useful in wound healing, hair growth, treatment of

XX disease such as Wilms' tumour, organ regeneration or differentiation

XX after injury or diseases, nerve cell or brain cell growth following

XX injury

XX Sequence 21 BP; 3 A; 5 C; 9 G; 4 T; 0 U; 0 Other;

Query Match 3.6%; Score 16.2; DB 1; Length 21;

Best Local Similarity 85.7%; Pred. No. 2.8e+02;

Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 431 CAGGACTCGGCTCACATGC 451

Db 21 CAGGACTCGGCTCACATGC 1

RESULT 283

ID AAT89247

AC AAT89247

XX 12-MAY-1998 (first entry)

XX DNA oligonucleotide 3, used in the measurement of Tm values.

XX Peptide nucleic acid; PNA; cancer; telomerase; probe; hybridisation;

XX inhibitor; human telomerase RNA; hTR; PCR; oligonucleotide; ss.

XX Synthetic.

XX WO9738013-A1.

XX 16-OCT-1997.

XX 09-APR-1997; 97WO-US005931.

XX 09-APR-1996; 96US-00630019.

XX (GERO-) GERON CORP.

XX Shay JW, Wright WE, Piatyszek MA, Corey D, Norton JC;

XX WPI; 1997-512647/47.

XX New peptide nucleic acids hybridising to mammalian telomerase RNA - used

XX to inhibit telomerase, for treating tumours and other proliferative

XX diseases, also for diagnosis.

XX Example 2; Page 49; 76pp; English.

XX This is an oligonucleotide used in the measurement of Tm values and their

XX complementary peptide nucleic acids (PNAs), (e.g. AAT89236-R89239). PNAs

CC hybridise specifically to an RNA component of mammalian telomerase, and

CC include the sequence GGG for specific hybridisation to the template

CC region of this component. PNAs can be used as probes to detect the RNA

CC component of mammalian telomerase and as inhibitors of telomerase

CC activity, especially in the treatment of cancer

XX Sequence 16 BP; 5 A; 2 C; 6 G; 3 T; 0 U; 0 Other;

Query Match 3.5%; Score 16; DB 1; Length 16;

Best Local Similarity 100.0%; Pred. No. 2.1e+02;

Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 53 TAACTGAGAAGGGCGT 68

Db 1 TAACTGAGAAGGGCGT 16

RESULT 284

AAA37569

ID AAA37569 standard; DNA; 16 BP.

XX AAA37569;

XX 15-AUG-2000 (first entry)

XX PNA sequence #27 used to inhibit telomerase activity.

XX Peptide nucleic acid; PNA; telomerase; ribonucleoprotein enzyme; cancer;

XX inhibitor; neoplasia; neurodegenerative disease; aging; hyperplasia;

XX AIDS; HIV; fungal infection; forensic identification; detect; tumour;

XX paternity testing; ss.

XX Synthetic.

XX Key Location/Qualifiers

XX misc\_feature 1..16

XX /tag= a

XX /note= "Peptide nucleic acid molecule, where N-(2-

XX aminoethyl)glycine units are linked to nucleotide bases

XX via glycine amino N through a methylenecarbonyl linker"

XX US6046307-A.

XX 04-APR-2000.

XX 09-APR-1997; 97US-00838545.

XX 09-APR-1996; 96US-00630019.

XX (TEXA ) UNIV TEXAS SYSTEM.

XX Wright WE, Piatyszek MA, Shay JW, Norton JC, Corey DR;

XX WPI; 2000-292432/25.

XX New peptide nucleic acid (PNA) compounds that inhibit telomerase activity

XX in mammalian cells is useful as probes to detect the RNA component of a

XX mammalian telomerase.

XX Example 2; Col 33; 45pp; English.

XX The present sequence represents a peptide nucleic acid molecule which

XX hybridises to the mRNA component of mammalian telomerase, and inhibits

XX telomerase activity. Telomerase is a ribonucleoprotein enzyme that

XX synthesizes one strand of the telomeric DNA, using as a template an 11

XX nucleotide sequence contained within the RNA component of the enzyme. The

XX invention relates to PNA molecules having a sequence of no more than 25

XX bases, which include the sequence GTTAGG. The uncharged nature of the PNA

XX backbone increases the melting temperature of associating strands,

XX increases the rate of association with targeted nucleic acids, and

XX affords greater resistance of degradation by proteases or nucleases. The

XX therapeutic PNAs may be used for treating disease conditions such as

XX cancers, neoplasia, hyperplasia, neurodegenerative diseases, aging, human

CC immunodeficiency virus (HIV) infection/AIDS (acquired immunodeficiency  
 CC syndrome) and associated pathologies, fungal infections, and other  
 CC diseases characterized by abnormal telomere metabolism or telomerase  
 CC activity, in combination with antineoplastic and other cytotoxic or  
 CC cytostatic agents, antifungal agents, and other nucleotides. PNAs may be  
 CC used for molecular diagnostics, labelled PNAs are used as hybridization  
 CC probes to detect or quantitate polynucleotides having a human telomerase  
 CC RNA (hTR) sequence. PNA probes are also used for forensic identification  
 CC of individuals, e.g. paternity testing, based on hTR gene restriction  
 CC fragment length polymorphism (RFLP) pattern. PNAs are also useful as  
 CC probes to detect the RNA component of a mammalian telomerase and as  
 CC inhibitors of telomerase activity. The method of the present invention  
 CC allows cancerous conditions to be detected with increased confidence and  
 CC possibly at an earlier stage, before cells are detected as cancerous  
 CC based on pathological characteristics. The diagnostic and prognostic  
 CC methods of the present invention can be used to detect an immortal or  
 CC neoplastic cell or tumour tissue or cancer of any origin, provided the  
 CC cell expresses telomerase activity and its RNA component  
 XX

SQ Sequence 16 BP; 5 A; 2 C; 6 G; 3 T; 0 U; 0 Other;  
 Query Match 3.5%; Score 16; DB 1; Length 16;  
 Best Local Similarity 100.0%; Pred. No. 2.1e+02;  
 Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 53 TAACTGAGAAGGCGT 68  
 |||||  
 Db 1 TAACTGAGAAGGCGT 16

RESULT 285  
 AAS15447  
 ID AAS15447 standard; DNA; 16 BP.  
 XX  
 AC AAS15447;  
 XX  
 DT 14-FEB-2002 (first entry)  
 XX  
 DE Oligonucleotide #3 used in melting temperature studies of PNAs.  
 KW Mammalian; paternity testing; human telomerase RNA component;  
 KW hTR gene RFLP pattern; cancer; inflammation; forensic;  
 KW lymphoproliferative disease; autoimmune disease; hyperplasia;  
 KW neurodegenerative disease; neoplasia; HIV; AIDS; cytostatic;  
 KW human immunodeficiency virus; acquired immunodeficiency syndrome;  
 KW telomere metabolism; anti-inflammatory; immunosuppressive; ss.  
 XX  
 OS Homo sapiens.  
 OS Synthetic.  
 XX  
 PN US6294650-B1.  
 XX  
 PD 25-SEP-2001.  
 XX  
 PF 08-JUL-1999; 99US-00349532.  
 XX  
 PR 09-APR-1996; 96US-00630019.  
 PR 09-APR-1997; 97US-00838545.  
 XX  
 PA (TEXA ) UNIV TEXAS SYSTEM.  
 XX  
 PI Shay JW, Wright WE, Piatyszek MA, Corey DR, Norton JC;  
 XX  
 DR WPI; 2001-638024/73.  
 XX  
 XX New peptide nucleic acids that hybridizes to the RNA component of  
 PT mammalian telomerase, useful for treating or preventing cancer, or  
 PT inflammation, lymphoproliferative diseases, autoimmune disease, or  
 PT neurodegenerative diseases.  
 XX  
 PS Example 2; Col 34; 46pp; English.  
 XX  
 XX The present invention relates to peptide nucleic acids (PNAs), comprising

CC a sequence of 6-25 nucleobases, that inhibit telomerase activity in  
 CC mammalian cells by hybridising to the RNA component of mammalian  
 CC telomerase. The PNAs are useful as probes to detect the RNA component of  
 CC mammalian telomerase and as inhibitors of telomerase activity, or to  
 CC detect and/or quantitate polynucleotide having the human telomerase RNA  
 CC component (hTR) sequence, as well as in forensic identification of  
 CC individuals, such as paternity testing or identification of criminal  
 CC suspects or unknown descendants based on the hTR gene RFLP pattern. The  
 CC PNA can be further used for treating or preventing cancer, inflammation,  
 CC lymphoproliferative diseases, autoimmune disease, or neurodegenerative  
 CC diseases. The PNAs in combination with other pharmaceuticals (such as  
 CC antineoplastic or cytostatic agents) can be used for treating neoplasia,  
 CC hyperplasia, human immunodeficiency virus (HIV) infections, acquired  
 CC immunodeficiency syndrome (AIDS) and associated pathologies, and other  
 CC diseases characterised by abnormal telomere metabolism or telomerase  
 CC activity. The present sequence representing a DNA oligonucleotide is  
 CC complementary to some of the PNAs of the present invention, and is used  
 CC in melting temperature studies  
 XX

SQ Sequence 16 BP; 5 A; 2 C; 6 G; 3 T; 0 U; 0 Other;  
 Query Match 3.5%; Score 16; DB 1; Length 16;  
 Best Local Similarity 100.0%; Pred. No. 2.1e+02;  
 Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 53 TAACTGAGAAGGCGT 68  
 |||||  
 Db 1 TAACTGAGAAGGCGT 16

RESULT 286  
 AAZ07277  
 ID AAZ07277 standard; DNA; 20 BP.  
 XX  
 AC AAZ07277;  
 XX  
 DT 22-OCT-1999 (first entry)  
 XX  
 DE Human telomerase RNA gene (hTR) specific primer hTRg.  
 KW Telomerase RNA; TR; promoter; cytotoxin; cancer; neoplasia; hTR;  
 KW gene therapy; thymidine kinase gene; anticancer therapy; human;  
 KW PCR primer; ss.  
 XX  
 OS Synthetic.  
 OS Homo sapiens.  
 XX  
 PN WO938964-A2.  
 XX  
 PD 05-AUG-1999.  
 XX  
 PF 29-JAN-1999; 99WO-GB000308.  
 XX  
 PR 29-JAN-1998; 98GB-00001902.  
 XX  
 PA (CANC-) CANCER RES CAMPAIGN TECHNOLOGY.  
 XX  
 PI Keith WN;  
 XX  
 DR WPI; 1999-479183/40.  
 XX  
 PT Mouse and human telomerase RNA gene promoters, useful for tumor specific  
 PT gene therapy.  
 XX  
 PS Disclosure; Fig 6; 109pp; English.  
 XX  
 CC The invention relates to promoter regions from mouse and human telomerase  
 CC RNA (TR) component genes. The TR gene promoter can be linked to a  
 CC heterologous gene, especially a gene encoding a cytotoxin, for therapy of  
 CC cancer, especially neoplasias. The telomerase is necessary for the  
 CC unrestricted proliferative capacity of many human cancers. Mutation or  
 CC dysregulation of the telomerase repression pathway may cause reactivation  
 CC or upregulation of telomerase expression in cancer. Substances,

CC identified in the methods, can be used to block transcription from the TR  
 CC gene promoter through interaction of the 5' regulatory sequences. These  
 CC substances, e.g. antisense oligonucleotides, transcription factors,  
 CC peptide nucleic acids and factors that disrupt signal transduction, are  
 CC useful for cancer therapy. In particular, gene therapy vectors  
 CC (especially pGT62-codAupp) comprising the promoter and a viral thymidine  
 CC kinase gene can be used to convert a prodrug, e.g. gancyclovir, so that  
 CC neoplasia can be controlled or treated. Direct down-regulation of  
 CC telomerase RNA gene through manipulation of transcription factors may be  
 CC effective anticancer therapy and the cloning of the hTR gene promoter  
 CC allows the analysis of therapeutic molecules which modulate hTR promoter  
 CC activity. Sequences AA207623-80 represents PCR primers for amplifying  
 CC human TR gene (hTR) promoter sequence  
 XX  
 SQ Sequence 20 BP; 4 A; 7 C; 4 G; 5 T; 0 U; 0 Other;

Query Match 3.5%; Score 16; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 2.8e+02;  
 Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 436 CTCGGCTCACATGC 451  
 |||||  
 Db 1 CTCGGCTCACATGC 16

RESULT 287  
 ADH56499/c  
 ID ADH56499 standard; DNA; 20 BP.  
 XX  
 AC ADH56499;  
 XX  
 DT 25-MAR-2004 (first entry)  
 XX  
 DE Human tumour endothelial marker antisense oligonucleotide ISIS 208420.  
 XX  
 KW human; ss; antisense; hypothetical tumour endothelial marker; tumour;  
 KW hyperproliferative disorder; colon cancer; infection; inflammation.  
 XX  
 OS Synthetic.  
 OS Homo sapiens.  
 XX  
 XX US2003232770-A1.  
 XX

PD 18-DEC-2003.  
 XX  
 XX 17-JUN-2002; 2002US-00174020.  
 XX  
 XX 17-JUN-2002; 2002US-00174020.  
 XX

PA (ISIS-) ISIS PHARM INC.  
 XX  
 XX Monia BP, Dobie KW;  
 XX  
 XX WPI; 2004-061309/06.  
 XX  
 XX New antisense compound targeted to a nucleic acid molecule encoding  
 PT hypothetical tumor endothelial marker, useful for modulating expression  
 PT of hypothetical tumor endothelial marker or for treating colon cancer.  
 XX  
 XX Example 15; SEQ ID NO 71; 102pp; English.

XX The invention relates to a compound targeted to a nucleic acid molecule  
 CC encoding hypothetical tumour endothelial marker. The compound,  
 CC particularly the antisense oligonucleotide is useful in modulating the  
 CC function of nucleic acid molecules encoding hypothetical tumour  
 CC endothelial marker. The antisense compound can also be used as research  
 CC tools and diagnostics. It can also be used as tools in differential  
 CC and/or combinatorial analyses to elucidate expression patterns of a  
 CC portion or the entire complement of genes expressed within cells and  
 CC tissues. The compound can also be used for treating diseases or  
 CC conditions associated with hypothetical tumour endothelial marker,  
 CC preferably hyperproliferative disorder, e.g. colon cancer. The compound  
 CC can also be used as prophylaxis, e.g. to prevent or delay infection,

CC inflammation or tumour formation. The present sequence represents a human  
 CC hypothetical tumour endothelial marker target region.

SQ Sequence 20 BP; 1 A; 7 C; 4 G; 8 T; 0 U; 0 Other;  
 Query Match 3.5%; Score 15.8; DB 1; Length 20;  
 Best Local Similarity 89.5%; Pred. No. 2.9e+02;  
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 362 GGCCGACAGGAAGGAACG 380  
 |||||  
 Db 20 GGCCACAGGAAGGAACG 2

RESULT 288  
 ADH56566  
 ID ADH56566 standard; DNA; 20 BP.  
 XX  
 AC ADH56566;  
 XX  
 DT 25-MAR-2004 (first entry)  
 XX  
 DE Human hypothetical tumour endothelial marker target region ISIS 136034.  
 XX  
 KW human; ss; hypothetical tumour endothelial marker; tumour;  
 KW hyperproliferative disorder; colon cancer; infection; inflammation.  
 XX  
 OS Homo sapiens.  
 XX  
 XX US2003232770-A1.  
 XX

PD 18-DEC-2003.  
 XX  
 XX 17-JUN-2002; 2002US-00174020.  
 XX  
 XX 17-JUN-2002; 2002US-00174020.  
 XX

PA (ISIS-) ISIS PHARM INC.  
 XX  
 XX Monia BP, Dobie KW;  
 XX  
 XX WPI; 2004-061309/06.  
 XX  
 XX New antisense compound targeted to a nucleic acid molecule encoding  
 PT hypothetical tumor endothelial marker, useful for modulating expression  
 PT of hypothetical tumor endothelial marker or for treating colon cancer.  
 XX  
 XX Example 15; SEQ ID NO 138; 102pp; English.

XX The invention relates to a compound targeted to a nucleic acid molecule  
 CC encoding hypothetical tumour endothelial marker. The compound,  
 CC particularly the antisense oligonucleotide is useful in modulating the  
 CC function of nucleic acid molecules encoding hypothetical tumour  
 CC endothelial marker. The antisense compound can also be used as research  
 CC tools and diagnostics. It can also be used as tools in differential  
 CC and/or combinatorial analyses to elucidate expression patterns of a  
 CC portion or the entire complement of genes expressed within cells and  
 CC tissues. The compound can also be used for treating diseases or  
 CC conditions associated with hypothetical tumour endothelial marker,  
 CC preferably hyperproliferative disorder, e.g. colon cancer. The compound  
 CC can also be used as prophylaxis, e.g. to prevent or delay infection,  
 CC inflammation or tumour formation. The present sequence represents a human  
 CC hypothetical tumour endothelial marker target region.

SQ Sequence 20 BP; 8 A; 4 C; 7 G; 1 T; 0 U; 0 Other;  
 Query Match 3.5%; Score 15.8; DB 1; Length 20;  
 Best Local Similarity 89.5%; Pred. No. 2.9e+02;  
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 362 GGCCGACAGGAAGGAACG 380  
 |||||  
 Db 1 GGCCACAGGAAGGAACG 19



KW benign prostate hypertrophy; cancer; sarcoma; neoplasm; leukaemia;  
 KW lymphoma; biallelic marker; PCR primer; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO20000607-A1.  
 XX  
 PD 06-JAN-2000.  
 XX  
 XX 30-JUN-1999; 99WO-IB001242.  
 XX  
 PF 30-JUN-1998; 98US-0091315P.  
 PR 10-DEC-1998; 98US-0111909P.  
 XX  
 XX (GEST ) GENSET.  
 PA Bougueleret L;  
 PI  
 XX WPI; 2000-1117170/10.  
 DR  
 XX Novel nucleic acid and polymorphic markers used for diagnosis of  
 PT diseases, especially those involving abnormal cell proliferation and  
 PT differentiation.  
 XX  
 PS Claim 16; Page 206; 223pp; English.  
 XX  
 CC This sequence represents a PCR for the retinoblastoma binding protein-7  
 CC (RBP-7) genomic sequence (AAZ86967) of the invention. The RBP-7 coding  
 CC sequence and regulatory sequences are useful for the recombinant  
 CC production of the protein and for expressing heterologous nucleic acids.  
 CC Primers and probes derived from the RBP-7 nucleotide sequence (such as  
 CC this sequence) are useful for DNA amplification and detection methods.  
 CC RBP-7 biallelic markers (see AAZ86993-Z87034) are useful for diagnosis of  
 CC disease related to alteration in the regulation or in the coding regions  
 CC of the RBP-7 gene and for prognosis/diagnosis of an eventual treatment  
 CC with therapeutic agents, especially agents acting on pathologies  
 CC involving abnormal cell proliferation and/or differentiation, these  
 CC include thyroid hyperplasia, psoriasis, benign prostate hypertrophy,  
 CC cancers, including breast cancer, sarcomas and other neoplasms, bladder  
 CC cancer, colon cancer, lung cancer, prostate cancer, various leukaemias,  
 CC and lymphomas. RBP-7 antibodies are useful as diagnostic agents  
 XX  
 SQ Sequence 20 BP; 9 A; 3 C; 4 G; 4 T; 0 U; 0 Other;  
 Query Match 3.4%; Score 15.4; DB 1; Length 20;  
 Best Local Similarity 94.1%; Pred. No. 3.1e+02;  
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 OY 166 CAACAAAAAATGTCAG 182  
 DB 1 CAACAAATAAATGTCAG 17  
 RESULT 292  
 ADK20650/c  
 ID ADK20650 standard; DNA; 20 BP.  
 AC  
 XX ADK20650;  
 XX  
 DT 18-NOV-2004 (first entry)  
 XX  
 DE Acyl-coenzyme A synthetase 1, ACS1, antisense oligonucleotide #727.  
 XX  
 KW acyl-coenzyme A synthetase 1; ACS1; diabetes; obesity;  
 KW metabolic syndrome X; cardiovascular disorder; cancer; infection;  
 KW inflammation; tumour; antisense; ss.  
 XX  
 OS Synthetic.  
 XX  
 PN WO20004016749-A2.  
 XX  
 PD 26-FEB-2004.  
 XX

PF 14-AUG-2003; 2003WO-US025389.  
 XX  
 PR 14-AUG-2002; 2002US-0403591P.  
 XX  
 PA (PHAA ) PHARMACIA CORP.  
 XX  
 FI Ross SA;  
 XX  
 DR WPI; 2004-203782/19.  
 XX  
 XX New antisense compounds targeted to nucleic acid molecules encoding acyl-  
 PT coenzyme A synthetase 1 (ACS1), useful for treating diseases or  
 PT conditions associated with aberrant expression of ACS1, e.g. diabetes,  
 PT obesity or cancer.  
 XX  
 PS Claim 3; SEQ ID NO 727; 940pp; English.  
 XX  
 CC The invention relates to an antisense compound targeted to a nucleic acid  
 CC molecule encoding acyl-coenzyme A synthetase 1 (ACS1). The antisense  
 CC compound specifically hybridises with and inhibits the expression of  
 CC ACS1. The antisense oligonucleotides or compounds are useful for  
 CC inhibiting the expression of acyl-coenzyme A synthetase 1 (ACS1), and for  
 CC treating diseases or conditions associated with aberrant expression of  
 CC ACS1, e.g. diabetes, obesity, metabolic syndrome X, cardiovascular  
 CC disorder or cancer. The antisense compounds are also useful as research  
 CC reagents and kits, or in diagnostic, therapeutic and prophylactic  
 CC applications, e.g. to prevent or delay infection, inflammation or tumour  
 CC formation. The present sequence represents an acyl-coenzyme A synthetase  
 CC 1, ACS1, antisense oligonucleotide.  
 XX  
 SQ Sequence 20 BP; 2 A; 13 C; 2 G; 3 T; 0 U; 0 Other;  
 Query Match 3.4%; Score 15.4; DB 1; Length 20;  
 Best Local Similarity 94.1%; Pred. No. 3.1e+02;  
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 OY 333 GGGGGCGAGGCGAGGT 349  
 DB 20 GAGGGCGAGGCGAGGT 4  
 RESULT 293  
 ADK20828/c  
 ID ADK20828 standard; DNA; 20 BP.  
 XX  
 AC ADK20828;  
 XX  
 DT 18-NOV-2004 (first entry)  
 XX  
 DE Acyl-coenzyme A synthetase 1, ACS1, antisense oligonucleotide #905.  
 XX  
 KW acyl-coenzyme A synthetase 1; ACS1; diabetes; obesity;  
 KW metabolic syndrome X; cardiovascular disorder; cancer; infection;  
 KW inflammation; tumour; antisense; ss.  
 XX  
 OS Synthetic.  
 XX  
 PN WO20004016749-A2.  
 XX  
 PD 26-FEB-2004.  
 XX  
 DE 14-AUG-2003; 2003WO-US025389.  
 XX  
 PR 14-AUG-2002; 2002US-0403591P.  
 XX  
 PA (PHAA ) PHARMACIA CORP.  
 XX  
 FI Ross SA;  
 XX  
 DR WPI; 2004-203782/19.  
 XX  
 XX New antisense compounds targeted to nucleic acid molecules encoding acyl-  
 PT coenzyme A synthetase 1 (ACS1), useful for treating diseases or

PT conditions associated with aberrant expression of ACS1, e.g. diabetes,  
PT obesity or cancer.  
XX  
PS Claim 3; SEQ ID NO 905; 940pp; English.  
XX  
CC The invention relates to an antisense compound targeted to a nucleic acid  
CC molecule encoding acyl-coenzyme A synthetase 1 (ACS1). The antisense  
CC compound specifically hybridises with and inhibits the expression of  
CC ACS1. The antisense oligonucleotides or compounds are useful for  
CC inhibiting the expression of acyl-coenzyme A synthetase 1 (ACS1), and for  
CC treating diseases or conditions associated with aberrant expression of  
CC ACS1, e.g. diabetes, obesity, metabolic syndrome X, cardiovascular  
CC disorder or cancer. The antisense compounds are also useful as research  
CC reagents and kits, or in diagnostic, therapeutic and prophylactic  
CC applications, e.g. to prevent or delay infection, inflammation or tumour  
CC formation. The present sequence represents an acyl-coenzyme A synthetase  
CC 1, ACS1, antisense oligonucleotide.  
XX  
SQ Sequence 20 BP; 1 A; 12 C; 4 G; 3 T; 0 U; 0 Other;  
  
Query Match 3.4%; Score 15.4; DB 1; Length 20;  
Best Local Similarity 94.1%; Pred. No. 3.1e+02;  
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
  
Qy 332 CGGGGCGAGGCGAGG 348  
Db 17 CGAGGCGAGGCGGAGG 1  
  
RESULT 294  
AAC67060  
ID AAC67060 standard; DNA; 20 BP.  
AC  
AC AAC67060;  
XX  
DT 03-APR-2001 (first entry)  
XX  
DE Rat/human glutamate transporter GLAST PCR primer #2.  
XX  
KW Human; huntingtin; Huntington's disease; immunogen; fusion protein;  
KW PCR primer; ss.  
XX  
OS Homo sapiens.  
OS Rattus sp.  
XX  
XX WO200078813-A2.  
PN  
XX  
PD 28-DEC-2000.  
XX  
PF 19-JUN-2000; 2000WO-US016908.  
XX  
PR 18-JUN-1999; 99US-0140018P.  
XX  
XX (UYEM-) UNIV EMORY.  
PA  
XX Li X, Li S;  
PI  
XX WPI; 2001-102700/11.  
DR  
XX  
XX Novel rat pheochromocytoma PC12 cell line useful as cellular model of  
PT Huntington's disease, comprising an expression cassette containing a DNA  
PT encoding a truncated mutant huntingtin.  
XX  
XX Example 1; Page 21; 55pp; English.  
PS  
XX  
CC The present invention provides a rat or mouse pheochromocytoma cell line  
CC stably transfected with an expression cassette encoding a truncated  
CC mutant huntingtin. This can be used in the study of the pathological  
CC mechanism in Huntington's disease and enables the development of  
CC therapies and diagnostic techniques for the disease  
XX  
SQ Sequence 20 BP; 1 A; 7 C; 5 G; 7 T; 0 U; 0 Other;

Query Match 3.4%; Score 15.2; DB 1; Length 20;  
Best Local Similarity 85.0%; Pred. No. 3.2e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
  
Qy 313 CTGTCAGCGCGGCTCTCTC 332  
Db 1 CTGTCGCCACCGGTTTCTC 20  
  
RESULT 295  
ADK21153/c  
ID ADK21153 standard; DNA; 20 BP.  
XX  
AC ADK21153;  
XX  
DT 18-NOV-2004 (first entry)  
XX  
DE Acyl-coenzyme A synthetase 1, ACS1, antisense oligonucleotide #1230.  
XX  
KW acyl-coenzyme A synthetase 1; ACS1; diabetes; obesity;  
KW metabolic syndrome X; cardiovascular disorder; cancer; infection;  
KW inflammation; tumour; antisense; ss.  
XX  
OS Synthetic.  
XX  
PN WO2004016749-A2.  
XX  
PD 26-FEB-2004.  
XX  
PF 14-AUG-2003; 2003WO-US025389.  
XX  
PR 14-AUG-2002; 2002US-0403591P.  
XX  
XX (PHAA ) PHARMACIA CORP.  
XX  
XX Ross SA;  
XX  
XX WPI; 2004-203782/19.  
DR  
XX  
PT New antisense compounds targeted to nucleic acid molecules encoding acyl-  
PT coenzyme A synthetase 1 (ACS1), useful for treating diseases or  
PT conditions associated with aberrant expression of ACS1, e.g. diabetes,  
PT obesity or cancer.  
XX  
XX Claim 3; SEQ ID NO 1230; 940pp; English.  
PS  
XX  
CC The invention relates to an antisense compound targeted to a nucleic acid  
CC molecule encoding acyl-coenzyme A synthetase 1 (ACS1). The antisense  
CC compound specifically hybridises with and inhibits the expression of  
CC ACS1. The antisense oligonucleotides or compounds are useful for  
CC inhibiting the expression of acyl-coenzyme A synthetase 1 (ACS1), and for  
CC treating diseases or conditions associated with aberrant expression of  
CC ACS1, e.g. diabetes, obesity, metabolic syndrome X, cardiovascular  
CC disorder or cancer. The antisense compounds are also useful as research  
CC reagents and kits, or in diagnostic, therapeutic and prophylactic  
CC applications, e.g. to prevent or delay infection, inflammation or tumour  
CC formation. The present sequence represents an acyl-coenzyme A synthetase  
CC 1, ACS1, antisense oligonucleotide.  
XX  
SQ Sequence 20 BP; 1 A; 11 C; 5 G; 3 T; 0 U; 0 Other;  
  
Query Match 3.4%; Score 15.2; DB 1; Length 20;  
Best Local Similarity 85.0%; Pred. No. 3.2e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
  
Qy 328 CTCTCGGGCGAGGCGGAG 347  
Db 20 CTGCCGAGGCGGAGGCGGAG 1  
  
RESULT 296  
AAT89229/c  
ID AAT89229 standard; DNA; 15 BP.





PA (GERO-) GERON CORP.  
XX Shay JW, Wright WE, Piatyszek MA, Corey D, Norton JC;  
XX WPI; 1997-512647/47.  
XX New peptide nucleic acids hybridising to mammalian telomerase RNA - used  
PT to inhibit telomerase, for treating tumours and other proliferative  
PT diseases, also for diagnosis.  
XX Claim 9; Page 59; 76pp; English.  
XX This sequence is a novel peptide nucleic acid (PNA), which acts as an  
CC inhibitor of mammalian, preferably human, telomerase. The PNAs hybridise  
CC specifically to an RNA component of mammalian telomerase, and include the  
CC sequence GGG for specific hybridisation to the template region of this  
CC component. PNAs can be used as probes to detect the RNA component of  
CC mammalian telomerase and as inhibitors of telomerase activity, especially  
CC in the treatment of cancer  
CC Revised record issued on 21-OCT-2004 : Correction to feature table key  
XX  
XX Sequence 15 BP; 3 A; 2 C; 5 G; 5 T; 0 U; 0 Other;  
SQ Query Match 3.3%; Score 15; DB 1; Length 15;  
Best Local Similarity 100.0%; Pred. No. 2.3e+02;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 46 CTAACCCCTAACTGAG 60  
Db | | | | | | | | | | | | | | |  
15 CTAACCCCTAACTGAG 1  
RESULT 299  
AAV41177/C  
ID AAV41177 standard; DNA; 15 BP.  
XX  
XX AAV41177;  
XX  
XX 08-OCT-1998 (first entry)  
XX RNA component of human telomerase (hTR) antisense oligo 2lab3.  
XX RNA component; human telomerase; antisense oligonucleotide; infection;  
XX neuroblastoma; bladder cancer; colon cancer; prostate cancer; cancer;  
XX contraception; sterilisation; immunosuppression; therapeutic; hTR;  
XX immune system down-regulation; anti-inflammatory therapy; ss.  
XX Synthetic.  
XX Homo sapiens.  
XX WO9828442-A1.  
XX 02-JUL-1998.  
XX 19-DEC-1997; 97WO-US023619.  
XX 20-DEC-1996; 96US-00770564.  
XX 20-DEC-1996; 96US-00770565.  
XX (GERO-) GERON CORP.  
XX Kim NW, Wu F, Kealey JT, Pruzan R, Weinrich SL;  
XX WPI; 1998-377670/32.  
XX New polynucleotide(s) anti:sense to human telomerase - used for detecting  
PT or inhibiting human telomerase, e.g. for treating cancers, contraception,  
PT immuno-suppression or treating infection.  
XX Claim 11; Page 65; 80pp; English.  
XX Sequences shown in AAV41169 to AAV41181 represent antisense  
CC

CC oligonucleotides to the RNA component of human telomerase (hTR). These  
CC antisense oligonucleotides specifically hybridise to a nucleotide  
CC sequence within an accessible region of the hTR, but that does not  
CC hybridise to a sequence within the template region of hTR. These  
CC oligonucleotides may specifically be used for detection of an RNA  
CC component of human telomerase in a sample. This is useful for diagnosing  
CC cancer (especially neuroblastoma, bladder, colon and prostate cancer),  
CC and providing prognosis for a cancer patient. The inhibitory  
CC oligonucleotides can inhibit the telomerase activity level in a cell by  
CC interfering with transcription of the RNA component, decreasing the half-  
CC life of the telomerase RNA component transcript, inhibiting assembly of  
CC the RNA component into the telomerase holoenzyme, or inhibiting the  
CC polymerase activity of telomerase. These antisense oligonucleotides can  
CC be used for inhibiting telomerase activity in both cultured cells and in  
CC cells in vivo. They can be used in therapeutics for treating or  
CC preventing cancer, for contraception or sterilisation, for  
CC immunosuppression, and for selectively down-regulating specific branches  
CC of the immune system, e.g. a specific subset of T-cells, in anti-  
CC inflammatory therapies or for treating infections by, e.g. yeast,  
CC parasites or fungi  
XX  
XX Sequence 15 BP; 5 A; 3 C; 4 G; 3 T; 0 U; 0 Other;  
SQ Query Match 3.3%; Score 15; DB 1; Length 15;  
Best Local Similarity 100.0%; Pred. No. 2.3e+02;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 152 CGTTCATCTCTAGAC 166  
Db | | | | | | | | | | | | | | |  
15 CGTTCATCTCTAGAC 1  
RESULT 300  
AAA37570  
ID AAA37570 standard; DNA; 15 BP.  
XX  
XX AAA37570;  
XX  
XX 15-AUG-2000 (first entry)  
XX PNA sequence #28 used to inhibit telomerase activity.  
XX Peptide nucleic acid; PNA; telomerase; ribonucleoprotein enzyme; cancer;  
XX inhibitor; neoplasia; neurodegenerative disease; aging; hyperplasia;  
XX AIDS; HIV; fungal infection; forensic identification; detect; tumour;  
XX paternity testing; ss.  
XX Synthetic.  
XX  
XX Key Location/Qualifiers  
FH misc\_feature 1..15  
FT /tag= a  
FT /notes "Peptide nucleic acid molecule, where N-(2-  
FT aminoethyl)glycine units are linked to nucleotide bases  
FT via glycine amino N through a methylenecarbonyl linker"  
XX  
XX US6046307-A.  
XX PN  
XX 04-APR-2000.  
XX  
XX 09-APR-1997; 97US-00838545.  
XX PF  
XX 09-APR-1996; 96US-00630019.  
XX PR  
XX (TEXA ) UNIV TEXAS SYSTEM.  
XX PA  
XX Wright WE, Piatyszek MA, Shay JW, Norton JC, Corey DR;  
XX WPI; 2000-292432/25.  
XX New peptide nucleic acid (PNA) compounds that inhibit telomerase activity  
PT in mammalian cells is useful as probes to detect the RNA component of a  
PT mammalian telomerase.  
PT

```

XX PS Example 2; Col 33; 45pp; English.
XX CC The present sequence represents a peptide nucleic acid molecule which
XX CC hybridises to the mRNA component of mammalian telomerase, and inhibits
XX CC telomerase activity. Telomerase is a ribonucleoprotein enzyme that
XX CC synthesizes one strand of the telomeric DNA, using as a template an 11
XX CC nucleotide sequence contained within the RNA component of the enzyme. The
XX CC invention relates to PNA molecules having a sequence of no more than 25
XX CC bases, which include the sequence GTTAGG. The uncharged nature of the PNA
XX CC backbone increases the melting temperature of associating strands,
XX CC increases the rate of association with targeted nucleic acids, and
XX CC affords greater resistance of degradation by proteases or nucleases. The
XX CC therapeutic PNAs may be used for treating disease conditions such as
XX CC cancers, neoplasia, hyperplasia, neurodegenerative diseases, aging, human
XX CC immunodeficiency virus (HIV) infection/AIDS (acquired immunodeficiency
XX CC syndrome) and associated pathologies, fungal infections, and other
XX CC diseases characterized by abnormal telomere metabolism or telomerase
XX CC activity, in combination with antineoplastic and other cytotoxic or
XX CC cytostatic agents, antifungal agents, and other nucleotides. PNAs may be
XX CC used for molecular diagnostics, labelled PNAs are used as hybridization
XX CC probes to detect or quantitate polynucleotides having a human telomerase
XX CC RNA (hTR) sequence. PNA probes are also used for forensic identification
XX CC of individuals, e.g. paternity testing, based on hTR gene restriction
XX CC fragment length polymorphism (RFLP) pattern. PNAs are also useful as
XX CC probes to detect the RNA component of a mammalian telomerase and as
XX CC inhibitors of telomerase activity. The method of the present invention
XX CC allows cancerous conditions to be detected with increased confidence and
XX CC possibly at an earlier stage, before cells are detected as cancerous
XX CC based on pathological characteristics. The diagnostic and prognostic
XX CC methods of the present invention can be used to detect an immortal or
XX CC neoplastic cell or tumour tissue or cancer of any origin, provided the
XX CC cell expresses telomerase activity and its RNA component
XX SQ Sequence 15 BP; 6 A; 4 C; 3 G; 2 T; 0 U; 0 Other;

Query Match 3.3%; Score 15; DB 1; Length 15;
Best Local Similarity 100.0%; Pred. No. 2.3e+02;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 49 ACCCTAACTGAGAG 63
Db 1 ACCCTAACTGAGAG 15

RESULT 301
AAA37587/C
ID AAA37587 standard; DNA; 15 BP.
XX AC AAA37587;
XX AC 15-AUG-2000 (first entry)
XX DT Antisense sequence #45 used to inhibit telomerase activity.
XX DE Peptide nucleic acid; PNA; telomerase; ribonucleoprotein enzyme; cancer;
XX KW inhibitor; neoplasia; neurodegenerative disease; aging; hyperplasia;
XX KW AIDS; HIV; fungal infection; forensic identification; detect; tumour;
XX KW paternity testing; ss.
XX OS Synthetic.
XX FH Key Location/Qualifiers
XX FT misc_feature 1..15
XX FT /*tag= a
XX FT /note= "Phosphorothioate internucleotide linkages"
XX XX
XX PN US6046307-A.
XX XX
XX PD 04-APR-2000.
XX XX
XX PF 09-APR-1997; 97US-00838545.
XX XX

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PR 09-APR-1996; 96US-00630019.
XX PA (TEXA ) UNIV TEXAS SYSTEM.
XX PI Wright WE, Piatyszek MA, Shay JW, Norton JC, Corey DR;
XX XX WPI; 2000-292432/25.
XX DR New peptide nucleic acid (PNA) compounds that inhibit telomerase activity
XX PT in mammalian cells is useful as probes to detect the RNA component of a
XX PT mammalian telomerase.
XX XX Example 1; Col 27-28; 45pp; English.
XX CC The present sequence represents an antisense oligonucleotide used as a
XX CC control sequence alongside a peptide nucleic acid molecule which
XX CC hybridises to the mRNA component of mammalian telomerase, and inhibits
XX CC telomerase activity. Telomerase is a ribonucleoprotein enzyme that
XX CC synthesizes one strand of the telomeric DNA, using as a template an 11
XX CC nucleotide sequence contained within the RNA component of the enzyme. The
XX CC invention relates to PNA molecules having a sequence of no more than 25
XX CC bases, which include the sequence GTTAGG. The uncharged nature of the PNA
XX CC backbone increases the melting temperature of associating strands,
XX CC increases the rate of association with targeted nucleic acids, and
XX CC affords greater resistance of degradation by proteases or nucleases. The
XX CC therapeutic PNAs may be used for treating disease conditions such as
XX CC cancers, neoplasia, hyperplasia, neurodegenerative diseases, aging, human
XX CC immunodeficiency virus (HIV) infection/AIDS (acquired immunodeficiency
XX CC syndrome) and associated pathologies, fungal infections, and other
XX CC diseases characterized by abnormal telomere metabolism or telomerase
XX CC activity, in combination with antineoplastic and other cytotoxic or
XX CC cytostatic agents, antifungal agents, and other nucleotides. PNAs may be
XX CC used for molecular diagnostics, labelled PNAs are used as hybridization
XX CC probes to detect or quantitate polynucleotides having a human telomerase
XX CC RNA (hTR) sequence. PNA probes are also used for forensic identification
XX CC of individuals, e.g. paternity testing, based on hTR gene restriction
XX CC fragment length polymorphism (RFLP) pattern. PNAs are also useful as
XX CC probes to detect the RNA component of a mammalian telomerase and as
XX CC inhibitors of telomerase activity. The method of the present invention
XX CC allows cancerous conditions to be detected with increased confidence and
XX CC possibly at an earlier stage, before cells are detected as cancerous
XX CC based on pathological characteristics. The diagnostic and prognostic
XX CC methods of the present invention can be used to detect an immortal or
XX CC neoplastic cell or tumour tissue or cancer of any origin, provided the
XX CC cell expresses telomerase activity and its RNA component
XX SQ Sequence 15 BP; 3 A; 2 C; 5 G; 5 T; 0 U; 0 Other;

Query Match 3.3%; Score 15; DB 1; Length 15;
Best Local Similarity 100.0%; Pred. No. 2.3e+02;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 46 CTAACCCCTAACTGAG 60
Db 15 CTAACCCCTAACTGAG 1

RESULT 302
AAA37545/C
ID AAA37545 standard; DNA; 15 BP.
XX AC AAA37545;
XX AC 15-AUG-2000 (first entry)
XX DT PNA sequence #2 used to inhibit telomerase activity.
XX DE Peptide nucleic acid; PNA; telomerase; ribonucleoprotein enzyme; cancer;
XX KW inhibitor; neoplasia; neurodegenerative disease; aging; hyperplasia;
XX KW AIDS; HIV; fungal infection; forensic identification; detect; tumour;
XX KW paternity testing; ss.
XX OS Synthetic.

```

XX	Key	Location/Qualifiers
PH	misc_feature	1..15
FT		/*tag= a
FT		/note= "Peptide nucleic acid molecule, where N-(2-
FT		aminoethylglycine units are linked to nucleotide bases
FT		via glycine amino N through a methylenecarbonyl linker"
XX		
PN	US6046307-A.	
XX		
PD	04-APR-2000.	
XX		
PD	09-APR-1997;	97US-00838545.
XX		
PP	09-APR-1996;	96US-00630019.
XX		
PA	(TEXA ) UNIV TEXAS SYSTEM.	
XX		
PI	Wright WE, Piatyszek MA, Shay JW, Norton JC, Corey DR;	
XX		
DR	WPI; 2000-292432/25.	
XX		
PT	New peptide nucleic acid (PNA) compounds that inhibit telomerase activity	
PT	in mammalian cells is useful as probes to detect the RNA component of a	
PT	mammalian telomerase.	
XX		
PS	Claim 6; Col 71; 45pp; English.	
XX		
CC	The present sequence represents a peptide nucleic acid molecule which	
CC	hybridises to the mRNA component of mammalian telomerase, and inhibits	
CC	telomerase activity. Telomerase is a ribonucleoprotein enzyme that	
CC	synthesizes one strand of the telomeric DNA, using as a template an 11	
CC	nucleotide sequence contained within the RNA component of the enzyme. The	
CC	invention relates to PNA molecules having a sequence of no more than 25	
CC	bases, which include the sequence GTTAGG. The uncharged nature of the PNA	
CC	backbone increases the melting temperature of associating strands,	
CC	increases the rate of association with targeted nucleic acids, and	
CC	affords greater resistance of degradation by proteases or nucleases. The	
CC	therapeutic PNAs may be used for treating disease conditions such as	
CC	cancers, neoplasia, hyperplasia, neurodegenerative diseases, aging, human	
CC	immunodeficiency virus (HIV) infection/AIDS (acquired immunodeficiency	
CC	syndrome) and associated pathologies, fungal infections, and other	
CC	diseases characterized by abnormal telomere metabolism or telomerase	
CC	activity, in combination with antineoplastic and other cytotoxic or	
CC	cytostatic agents, antifungal agents, and other nucleotides. PNAs may be	
CC	used for molecular diagnostics, labelled PNAs are used as hybridization	
CC	probes to detect or quantitate polynucleotides having a human telomerase	
CC	RNA (hTR) sequence. PNA probes are also used for forensic identification	
CC	of individuals, e.g. paternity testing, based on hTR gene restriction	
CC	fragment length polymorphism (RFLP) pattern. PNAs are also useful as	
CC	probes to detect the RNA component of a mammalian telomerase and as	
CC	inhibitors of telomerase activity. The method of the present invention	
CC	allows cancerous conditions to be detected with increased confidence and	
CC	possibly at an earlier stage, before cells are detected as cancerous	
CC	based on pathological characteristics. The diagnostic and prognostic	
CC	methods of the present invention can be used to detect an immortal or	
CC	neoplastic cell or tumour tissue or cancer of any origin, provided the	
CC	cell expresses telomerase activity and its RNA component	
XX		
SQ	Sequence 15 BP; 3 A; 2 C; 5 G; 5 T; 0 U; 0 Other;	
	Query Match	3.3%; Score 15; DB 1; Length 15;
	Best Local Similarity	100.0%; Pred. No. 2.3e+02;
	Matches	15; Conservative 0; Mismatches 0; Indels 0; Gaps 0
QY	46	CTAACCCCTAACTGAG 60
Db	15	CTAACCCCTAACTGAG 1
RESULT 303		
AAA37548/c		
ID	AAA37548	standard; DNA: 15 BP.

Query Match 3.3%; Score 15; DB 1; Length 15;  
 Best Local Similarity 100.0%; Pred. No. 2.3e+02;  
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 42 TTGCTTAACCCCTAAC 56  
 DB 15 TTGCTTAACCCCTAAC 1

RESULT 304  
 AAS15427/C  
 ID AAS15427 standard; DNA; 15 BP.  
 XX AC AAS15427;  
 XX DT 14-FEB-2002 (first entry)  
 XX DE PNA XIII inhibiting human and mammalian telomerase activity.  
 XX KW Mammalian; peptide nucleic acid; probe; forensic; paternity testing;  
 KW human telomerase RNA component; hTR gene RFLP pattern; cancer;  
 KW inflammation; lymphoproliferative disease; autoimmune disease;  
 KW neurodegenerative disease; neoplasia; hyperplasia; HIV; AIDS;  
 KW human immunodeficiency virus; acquired immunodeficiency syndrome;  
 KW telomere metabolism; mutant; cytostatic; anti-inflammatory;  
 KW immunosuppressive; polyamide backbone; ss.  
 XX OS Homo sapiens.  
 OS Synthetic.

XX FH Key Location/Qualifiers  
 FT modified\_base 1..15  
 FT /\*tag= a  
 FT /note= "This sequence is a peptide nucleic acid, i.e. it  
 FT contains a polyamide backbone instead of a deoxyribose  
 FT backbone"

XX XX US6294650-B1.  
 XX PD 25-SEP-2001.  
 XX PF 08-JUL-1999; 99US-00349532.  
 XX PR 09-APR-1996; 96US-00630019.  
 XX PR 09-APR-1997; 97US-00838545.  
 XX PA (TEXA ) UNIV TEXAS SYSTEM.  
 XX PI Shay JW, Wright WE, Piatyszek MA, Corey DR, Norton JC;  
 XX WPI; 2001-638024/73.  
 XX PT New peptide nucleic acids that hybridizes to the RNA component of  
 PT mammalian telomerase, useful for treating or preventing cancer,  
 PT inflammation, lymphoproliferative diseases, autoimmune disease, or  
 PT neurodegenerative diseases.  
 XX PS Claim 7; Col 73; 46pp; English.

XX CC The present invention relates to peptide nucleic acids (PNAs), comprising  
 CC a sequence of 6-25 nucleobases, that inhibit telomerase activity in  
 CC mammalian cells by hybridizing to the RNA component of mammalian  
 CC telomerase. The PNAs are useful as probes to detect the RNA component of  
 CC mammalian telomerase and as inhibitors of telomerase activity, or to  
 CC detect and/or quantitate polynucleotide having the human telomerase RNA  
 CC component (hTR) sequence, as well as in forensic identification of  
 CC individuals, such as paternity testing or identification of criminal  
 CC suspects or unknown descendants based on the hTR gene RFLP pattern. The  
 CC PNA can be further used for treating or preventing cancer, inflammation,  
 CC lymphoproliferative diseases, autoimmune disease, or neurodegenerative  
 CC diseases. The PNAs in combination with other pharmaceuticals (such as  
 CC antineoplastic or cytostatic agents) can be used for treating neoplasia,  
 CC hyperplasia, human immunodeficiency virus (HIV) infections, acquired

CC hyperplasia, human immunodeficiency virus (HIV) infections, acquired  
 CC immunodeficiency syndrome (AIDS) and associated pathologies, and other  
 CC diseases characterised by abnormal telomere metabolism or telomerase  
 CC activity. The present sequence represents one of the PNA sequences of the  
 CC invention  
 XX Sequence 15 BP; 5 A; 1 C; 5 G; 4 T; 0 U; 0 Other;  
 QY Query Match 3.3%; Score 15; DB 1; Length 15;  
 DB Best Local Similarity 100.0%; Pred. No. 2.3e+02;  
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 42 TTGCTTAACCCCTAAC 56  
 DB 15 TTGCTTAACCCCTAAC 1

RESULT 305  
 AAS15448  
 ID AAS15448 standard; DNA; 15 BP.  
 XX AC AAS15448;  
 XX DT 14-FEB-2002 (first entry)  
 XX DE Oligonucleotide #4 used in melting temperature studies of PNAs.  
 XX KW Mammalian; paternity testing; human telomerase RNA component;  
 KW hTR gene RFLP pattern; cancer; inflammation; forensic;  
 KW lymphoproliferative disease; autoimmune disease; hyperplasia;  
 KW neurodegenerative disease; neoplasia; HIV; AIDS; cytostatic;  
 KW human immunodeficiency virus; acquired immunodeficiency syndrome;  
 KW telomere metabolism; anti-inflammatory; immunosuppressive; ss.  
 XX OS Homo sapiens.  
 OS Synthetic.

XX XX US6294650-B1.  
 XX PD 25-SEP-2001.  
 XX PF 08-JUL-1999; 99US-00349532.  
 XX PR 09-APR-1996; 96US-00630019.  
 XX PR 09-APR-1997; 97US-00838545.  
 XX PA (TEXA ) UNIV TEXAS SYSTEM.  
 XX PI Shay JW, Wright WE, Piatyszek MA, Corey DR, Norton JC;  
 XX WPI; 2001-638024/73.  
 XX PT New peptide nucleic acids that hybridizes to the RNA component of  
 PT mammalian telomerase, useful for treating or preventing cancer,  
 PT inflammation, lymphoproliferative diseases, autoimmune disease, or  
 PT neurodegenerative diseases.  
 XX PS Example 2; Col 34; 46pp; English.

XX CC The present invention relates to peptide nucleic acids (PNAs), comprising  
 CC a sequence of 6-25 nucleobases, that inhibit telomerase activity in  
 CC mammalian cells by hybridizing to the RNA component of mammalian  
 CC telomerase. The PNAs are useful as probes to detect the RNA component of  
 CC mammalian telomerase and as inhibitors of telomerase activity, or to  
 CC detect and/or quantitate polynucleotide having the human telomerase RNA  
 CC component (hTR) sequence, as well as in forensic identification of  
 CC individuals, such as paternity testing or identification of criminal  
 CC suspects or unknown descendants based on the hTR gene RFLP pattern. The  
 CC PNA can be further used for treating or preventing cancer, inflammation,  
 CC lymphoproliferative diseases, autoimmune disease, or neurodegenerative  
 CC diseases. The PNAs in combination with other pharmaceuticals (such as  
 CC antineoplastic or cytostatic agents) can be used for treating neoplasia,  
 CC hyperplasia, human immunodeficiency virus (HIV) infections, acquired

CC immunodeficiency syndrome (AIDS) and associated pathologies, and other  
 CC diseases characterised by abnormal telomere metabolism or telomerase  
 CC activity. The present sequence representing a DNA oligonucleotide is  
 CC complementary to some of the PNAs of the present invention, and is used  
 CC in melting temperature studies

XX  
 SQ Sequence 15 BP; 6 A; 4 C; 3 G; 2 T; 0 U; 0 Other;  
 Query Match 3.3%; Score 15; DB 1; Length 15;  
 Best Local Similarity 100.0%; Pred. No. 2.3e+02;  
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 49 ACCCTAACTGAGAAG 63  
 Db 1 ACCCTAACTGAGAAG 15  
 |||||

RESULT 306  
 AAS15424/c  
 ID AAS15424 standard; DNA; 15 BP.  
 AC AAS15424;  
 XX  
 DT 14-FEB-2002 (first entry)  
 XX  
 DE PNA VII inhibiting human and mammalian telomerase activity.  
 XX  
 KW Mammalian; peptide nucleic acid; probe; forensic; paternity testing;  
 KW human telomerase RNA component; hTR gene RFLP pattern; cancer;  
 KW inflammation; lymphoproliferative disease; autoimmune disease;  
 KW neurodegenerative disease; neoplasia; hyperplasia; HIV; AIDS;  
 KW human immunodeficiency virus; acquired immunodeficiency syndrome;  
 KW telomere metabolism; mutant; cytostatic; anti-inflammatory;  
 KW immunosuppressive; polyamide backbone; ss.  
 XX  
 OS Homo sapiens.  
 OS Synthetic.  
 XX  
 FH Key Location/Qualifiers  
 FT modified\_base 1..15  
 FT /tag= a  
 FT /note= "This sequence is a peptide nucleic acid, i.e. it  
 FT contains a polyamide backbone instead of a deoxyribose  
 FT backbone"

US6294650-B1.  
 PD 25-SEP-2001.  
 XX  
 PF 08-JUL-1999; 99US-00349532.  
 XX  
 PF 09-APR-1996; 96US-00630019.  
 PR 09-APR-1997; 97US-00838545.  
 XX  
 PA (TEXA ) UNIV TEXAS SYSTEM.  
 XX  
 XX Shay JW, Wright WE, Piatyszek MA, Corey DR, Norton JC;  
 XX WPI; 2001-638024/73.  
 XX  
 XX New peptide nucleic acids that hybridizes to the RNA component of  
 PT mammalian telomerase, useful for treating or preventing cancer,  
 PT inflammation, lymphoproliferative diseases, autoimmune disease, or  
 PT neurodegenerative diseases.  
 XX  
 PS Claim 7; Col 73; 46pp; English.  
 XX  
 CC The present invention relates to peptide nucleic acids (PNAs), comprising  
 CC a sequence of 6-25 nucleobases, that inhibit telomerase activity in  
 CC mammalian cells by hybridising to the RNA component of mammalian  
 CC telomerase. The PNAs are useful as probes to detect the RNA component of  
 CC mammalian telomerase and as inhibitors of telomerase activity, or to  
 CC detect and/or quantitate polynucleotide having the human telomerase RNA

CC component (hTR) sequence, as well as in forensic identification of  
 CC individuals, such as paternity testing or identification of criminal  
 CC suspects or unknown descendants based on the hTR gene RFLP pattern. The  
 CC PNA can be further used for treating or preventing cancer, inflammation,  
 CC lymphoproliferative diseases, autoimmune disease, or neurodegenerative  
 CC diseases. The PNAs in combination with other pharmaceuticals (such as  
 CC antineoplastic or cytostatic agents) can be used for treating neoplasia,  
 CC hyperplasia, human immunodeficiency virus (HIV) infections, acquired  
 CC immunodeficiency syndrome (AIDS) and associated pathologies, and other  
 CC diseases characterised by abnormal telomere metabolism or telomerase  
 CC activity. The present sequence represents one of the PNA sequences of the  
 CC invention

XX  
 SQ Sequence 15 BP; 3 A; 2 C; 5 G; 5 T; 0 U; 0 Other;  
 Query Match 3.3%; Score 15; DB 1; Length 15;  
 Best Local Similarity 100.0%; Pred. No. 2.3e+02;  
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 46 CTAACCCCTAACTGAG 60  
 Db 15 CTAACCCCTAACTGAG 1  
 |||||

RESULT 307  
 AAS15458/c  
 ID AAS15458 standard; DNA; 15 BP.  
 AC AAS15458;  
 XX  
 DT 14-FEB-2002 (first entry)  
 XX  
 DE Phosphorothioate (PS) oligomer II used to inhibit telomerase activity.  
 XX  
 KW Mammalian; forensic; paternity testing; human telomerase RNA component;  
 KW hTR gene RFLP pattern; cancer; inflammation; lymphoproliferative disease;  
 KW autoimmune disease; neurodegenerative disease; neoplasia; hyperplasia;  
 KW HIV; AIDS; human immunodeficiency virus; telomere metabolism; mutant;  
 KW acquired immunodeficiency syndrome; cytostatic; anti-inflammatory;  
 KW immunosuppressive; phosphorothioate; ss.  
 XX  
 OS Homo sapiens.  
 OS Synthetic.  
 XX  
 FH Key Location/Qualifiers  
 FT modified\_base 1..15  
 FT /tag= a  
 FT /label= OTHER  
 FT /note= "Phosphorothioate internucleotide linkages"

US6294650-B1.  
 PD 25-SEP-2001.  
 XX  
 PF 08-JUL-1999; 99US-00349532.  
 XX  
 PF 09-APR-1996; 96US-00630019.  
 PR 09-APR-1997; 97US-00838545.  
 XX  
 PA (TEXA ) UNIV TEXAS SYSTEM.  
 XX  
 XX Shay JW, Wright WE, Piatyszek MA, Corey DR, Norton JC;  
 XX WPI; 2001-638024/73.  
 XX  
 XX New peptide nucleic acids that hybridizes to the RNA component of  
 PT mammalian telomerase, useful for treating or preventing cancer,  
 PT inflammation, lymphoproliferative diseases, autoimmune disease, or  
 PT neurodegenerative diseases.  
 XX  
 PS Example 1; Col 29; 46pp; English.  
 XX  
 CC The present invention relates to peptide nucleic acids (PNAs), comprising

CC a sequence of 6-25 nucleobases, that inhibit telomerase activity in  
 CC mammalian cells by hybridising to the RNA component of mammalian  
 CC telomerase. The PNAs are useful as probes to detect the RNA component of  
 CC mammalian telomerase and as inhibitors of telomerase activity, or to  
 CC detect and/or quantitate polynucleotide having the human telomerase RNA  
 CC component (hTR) sequence, as well as in forensic identification of  
 CC individuals, such as paternity testing or identification of criminal  
 CC suspects or unknown descendants based on the hTR gene RFLP pattern. The  
 CC PNA can be further used for treating or preventing cancer, inflammation,  
 CC lymphoproliferative diseases, autoimmune disease, or neurodegenerative  
 CC diseases. The PNAs in combination with other pharmaceuticals (such as  
 CC antineoplastic or cytostatic agents) can be used for treating neoplasia,  
 CC hyperplasia, human immunodeficiency virus (HIV) infections, acquired  
 CC immunodeficiency syndrome (AIDS) and associated pathologies, and other  
 CC diseases characterized by abnormal telomere metabolism or telomerase  
 CC activity. The present sequence represents a phosphorothioate (PS)  
 CC oligomer used to inhibit telomerase activity in the methods of the  
 CC present invention

XX Sequence 15 BP; 3 A; 2 C; 5 G; 5 T; 0 U; 0 Other;

Query Match 3.3%; Score 15; DB 1; Length 15;  
 Best Local Similarity 100.0%; Pred. No. 2.3e+02;  
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 46 CTAACCCCTAAGTGAG 60  
 Db 15 CTAACCCCTAAGTGAG 1

RESULT 308  
 AAS15927/C  
 ID AAS15927 standard; DNA; 15 BP.

AC AAS15927;

DT 27-FEB-2002 (first entry)

DE Human telomerase polynucleotide inhibitor #8.

XX Human; telomerase; hTR; cytostatic; anti-inflammatory; adenocarcinoma;  
 KW breast; prostate; colon; mixed cell leukaemia; Hodgkin's disease;  
 KW fertility; inflammatory condition; tumour; cancer; veterinary;  
 KW immunosuppression; telomerase inhibitor; ss.

XX Homo sapiens.  
 OS Synthetic.

XX Key Location/Qualifiers  
 FH modified\_base 1..15  
 FT /\*tag= a  
 FT /mod\_base= OTHER  
 FT /note= "N3'-P5' phosphoramidate linkages"

XX WO200174136-A2.

XX 11-OCT-2001.

XX 30-MAR-2001; 2001WO-US010476.

XX 31-MAR-2000; 2000US-00540119.

XX (GERO-) GERON CORP.

XX Gryaznov SM, Pruzan R, Weinrich SL;

XX WPI; 2001-656955/75.

XX New polynucleotide useful for inhibiting telomerase activity in cells, or  
 PT for treating telomerase-mediated condition or disease, such as cancers,  
 PT tumors, Hodgkin's disease, or inflammatory conditions.

PS Claim 8; Page 36; 48pp; English.

XX The invention relates to polynucleotide inhibitors (I) and methods for  
 CC inhibiting telomerase activity. (I) are useful in inhibiting telomerase  
 CC activity and proliferation of a telomerase positive cell, and in  
 CC manufacturing a medicament for inhibiting telomerase activity in a cell  
 CC and in treating telomerase-mediated condition or disease, such as  
 CC adenocarcinoma of breast, prostate or colon, mixed cell leukaemia,  
 CC Hodgkin's disease, fertility and inflammatory conditions. (I) are also  
 CC useful in treating a tumour or in manufacturing a medicament for the  
 CC treatment of tumour. The polynucleotide inhibitors may also be used in  
 CC diagnostic assays for detecting RNA or DNA. Inhibition of telomerase  
 CC activity in cells in vivo is useful in prophylactic and therapeutic  
 CC methods of treating cancer and other disorders involving inappropriate  
 CC expression of telomerase, and in treating veterinary proliferative  
 CC diseases. Inhibition of telomerase in haematopoietic stem cells is useful  
 CC for immunosuppression and for selectively down-regulating specific  
 CC branches of the immune system. The present sequence represents human  
 CC telomerase polynucleotide inhibitor #8, as described in the method of the  
 CC invention

XX Sequence 15 BP; 3 A; 2 C; 9 G; 1 T; 0 U; 0 Other;

Query Match 3.3%; Score 15; DB 1; Length 15;  
 Best Local Similarity 100.0%; Pred. No. 2.3e+02;  
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 137 CCTGCCGCCTTCCAC 151  
 Db 15 CCTGCCGCCTTCCAC 1

RESULT 309  
 AAS15931/C  
 ID AAS15931 standard; DNA; 15 BP.

AC AAS15931;

DT 27-FEB-2002 (first entry)

DE Human telomerase polynucleotide inhibitor #12.

XX Human; telomerase; hTR; cytostatic; anti-inflammatory; adenocarcinoma;  
 KW breast; prostate; colon; mixed cell leukaemia; Hodgkin's disease;  
 KW fertility; inflammatory condition; tumour; cancer; veterinary;  
 KW immunosuppression; telomerase inhibitor; ss.

XX Homo sapiens.  
 OS Synthetic.

XX Key Location/Qualifiers  
 FH modified\_base 1..15  
 FT /\*tag= a  
 FT /mod\_base= OTHER  
 FT /note= "N3'-P5' phosphoramidate linkages"

XX WO200174136-A2.

XX 11-OCT-2001.

XX 30-MAR-2001; 2001WO-US010476.

XX 31-MAR-2000; 2000US-00540119.

XX (GERO-) GERON CORP.

XX Gryaznov SM, Pruzan R, Weinrich SL;

XX WPI; 2001-656955/75.

XX New polynucleotide useful for inhibiting telomerase activity in cells, or  
 PT for treating telomerase-mediated condition or disease, such as cancers,  
 PT tumors, Hodgkin's disease, or inflammatory conditions.

XX Example 3; Page 32; 48pp; English.

XX The invention relates to polynucleotide inhibitors (I) and methods for  
 CC inhibiting telomerase activity. (I) are useful in inhibiting telomerase  
 CC activity and proliferation of a telomerase positive cell, and in  
 CC manufacturing a medicament for inhibiting telomerase activity in a cell  
 CC and in treating telomerase-mediated condition or disease, such as  
 CC adenocarcinoma of breast, prostate or colon, mixed cell leukaemia,  
 CC Hodgkin's disease, fertility and inflammatory conditions. (I) are also  
 CC useful in treating a tumour or in manufacturing a medicament for the  
 CC treatment of tumour. The polynucleotide inhibitors may also be used in  
 CC diagnostic assays for detecting RNA or DNA. Inhibition of telomerase  
 CC activity in cells in vivo is useful in prophylactic and therapeutic  
 CC methods of treating cancer and other disorders involving inappropriate  
 CC expression of telomerase, and in treating veterinary proliferative  
 CC diseases. Inhibition of telomerase in haematopoietic stem cells is useful  
 CC for immunosuppression and for selectively down-regulating specific  
 CC branches of the immune system. The present sequence represents human  
 CC telomerase polynucleotide inhibitor #12, as described in the method of  
 CC the invention

SQ Sequence 15 BP; 6 A; 1 C; 6 G; 2 T; 0 U; 0 Other;

Query Match 3.3%; Score 15; DB 1; Length 15;  
 Best Local Similarity 100.0%; Pred. No. 2.3e+02;  
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 147 TCCACCGTTCATCT 161

Db 15 TCCACCGTTCATCT 1

RESULT 310

AAS15932/c

ID AAS15932 standard; DNA; 15 BP.

AC AAS15932;

XX 27-FEB-2002 (first entry)

DT Human telomerase polynucleotide inhibitor #13.

DE Human; telomerase; hTR; cytostatic; anti-inflammatory; adenocarcinoma;  
 KW breast; prostate; colon; mixed cell leukaemia; Hodgkin's disease;  
 KW fertility; inflammatory condition; tumour; cancer; veterinary;  
 KW immunosuppression; telomerase inhibitor; ss.

XX Homo sapiens.

OS Synthetic.

XX Key Location/Qualifiers

FT modified\_base 1..15  
 FT /\*tag= a  
 FT /mod\_base= OTHER  
 FT /not= "N3'-P5' phosphoramidate linkages"

XX WO200174136-A2.

PN 11-OCT-2001.

XX 30-MAR-2001; 2001WO-US010476.

XX 31-MAR-2000; 2000US-00540119.

XX (GERO-) GERON CORP.

XX Gryaznov SM, Pruzan R, Weinrich SL;

XX WPI; 2001-656955/75.

XX New polynucleotide useful for inhibiting telomerase activity in cells, or  
 PT for treating telomerase-mediated condition or disease, such as cancers,  
 PT tumors, Hodgkin's disease, or inflammatory conditions.

XX

PS Example 3; Page 32; 48pp; English.

XX The invention relates to polynucleotide inhibitors (I) and methods for  
 CC inhibiting telomerase activity. (I) are useful in inhibiting telomerase  
 CC activity and proliferation of a telomerase positive cell, and in  
 CC manufacturing a medicament for inhibiting telomerase activity in a cell  
 CC and in treating telomerase-mediated condition or disease, such as  
 CC adenocarcinoma of breast, prostate or colon, mixed cell leukaemia,  
 CC Hodgkin's disease, fertility and inflammatory conditions. (I) are also  
 CC useful in treating a tumour or in manufacturing a medicament for the  
 CC treatment of tumour. The polynucleotide inhibitors may also be used in  
 CC diagnostic assays for detecting RNA or DNA. Inhibition of telomerase  
 CC activity in cells in vivo is useful in prophylactic and therapeutic  
 CC methods of treating cancer and other disorders involving inappropriate  
 CC expression of telomerase, and in treating veterinary proliferative  
 CC diseases. Inhibition of telomerase in haematopoietic stem cells is useful  
 CC for immunosuppression and for selectively down-regulating specific  
 CC branches of the immune system. The present sequence represents human  
 CC telomerase polynucleotide inhibitor #13, as described in the method of  
 CC the invention

.SQ Sequence 15 BP; 5 A; 1 C; 7 G; 2 T; 0 U; 0 Other;

Query Match 3.3%; Score 15; DB 1; Length 15;  
 Best Local Similarity 100.0%; Pred. No. 2.3e+02;  
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 144 CCTTCCACCGTTCAT 158

Db 15 CCTTCCACCGTTCAT 1

RESULT 311

ADP87875/c

ID ADP87875 standard; DNA; 15 BP.

XX ADP87875;

XX 26-AUG-2004 (first entry)

DE 2',5'-oligoadenylic acid analog related oligonucleotide #2.

XX Cytostatic; virucide; 2'; 5'-oligoadenylic acid analog; antitumour;  
 KW antiviral; cancer; ss.

XX Synthetic.

XX Key Location/Qualifiers

FT modified\_base 1..15  
 FT /\*tag= a  
 FT /mod\_base= OTHER  
 FT /not= "2',4'-oxyethylene linkage in the sugar residues"  
 FT modified\_base 15  
 FT /\*tag= b  
 FT /mod\_base= OTHER  
 FT /not= "A-hydroxyethyl phosphate"

XX WO2004046161-A1.

XX 03-JUN-2004.

XX 19-NOV-2003; 2003WO-JP014748.

XX 19-NOV-2002; 2002JP-00334731.

XX (SANY ) SANKYO CO LTD.

XX Koizumi M, Morita K;

XX WPI; 2004-460494/43.

XX Stable 2',5'-oligoadenylic acid analogs containing natural and modified



PT nucleic acid units as well as unusual phosphate groups with excellent  
PT activity particularly antitumor, applicable in cancer or antiviral  
PT therapy.  
XX  
XX  
PS Disclosure; Page 100; 220pp; Japanese.  
XX  
XX The present invention relates to novel 2',5'-oligoadenylic acid analogs  
CC and their pharmacologically- acceptable salts. The analogs are stable  
CC with superior antitumor and antiviral activity and so are useful in  
CC cancer or antiviral therapy e.g. as antisense drugs. The present sequence  
CC was used to illustrate the invention.  
XX  
XX  
SQ Sequence 15 BP; 5 A; 3 C; 7 G; 0 T; 0 U; 0 Other;  
Query Match 3.3%; Score 15; DB 1; Length 15;  
Best Local Similarity 100.0%; Pred. No. 2.3e+02;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Qy 80 TTTTGCTCCCGCGC 94  
|||||  
Db 15 TTTTGCTCCCGCGC 1  
RESULT 312  
ADP87878/C  
ID ADP87878 standard; DNA; 15 BP.  
XX  
XX  
AC ADP87878;  
XX  
XX 26-AUG-2004 (first entry)  
XX  
DE 2',5'-oligoadenylic acid analog related oligonucleotide #5.  
XX  
XX Cytostatic; virucide; 2'; 5'-oligoadenylic acid analog; antitumor;  
XX antiviral; cancer; ss.  
XX  
XX Synthetic.  
XX  
XX  
XX Key Location/Qualifiers  
FH modified\_base 1..5  
FT /\*tag= a  
FT /mod\_base= OTHER  
FT /note= "2',4'-oxyethylene linkage in the sugar residues"  
FT modified\_base 6..11  
FT /\*tag= d  
FT /mod\_base= OTHER  
FT /note= "phosphorothioate backbone"  
FT modified\_base 11..15  
FT /\*tag= c  
FT /mod\_base= OTHER  
FT /note= "2',4'-oxyethylene linkage in the sugar residues"  
FT modified\_base 15  
FT /\*tag= b  
FT /mod\_base= OTHER  
FT /note= "A-hydroxyethyl phosphate"  
XX  
XX WO2004046161-A1.  
XX  
XX 03-JUN-2004.  
XX  
XX 19-NOV-2003; 2003WO-JP014748.  
XX  
XX 19-NOV-2002; 2002JP-00334731.  
XX  
XX (SANY ) SANKYO CO LTD.  
XX  
XX Koizumi M, Morita K;  
XX  
XX WPI; 2004-460494/43.  
XX  
XX Stable 2',5'-oligoadenylic acid analogs containing natural and modified  
PT nucleic acid units as well as unusual phosphate groups with excellent  
PT activity particularly antitumor, applicable in cancer or antiviral

PT therapy.  
XX  
XX Disclosure; Page 100; 220pp; Japanese.  
XX  
XX The present invention relates to novel 2',5'-oligoadenylic acid analogs  
CC and their pharmacologically- acceptable salts. The analogs are stable  
CC with superior antitumor and antiviral activity and so are useful in  
CC cancer or antiviral therapy e.g. as antisense drugs. The present sequence  
CC was used to illustrate the invention.  
XX  
XX  
SQ Sequence 15 BP; 5 A; 3 C; 7 G; 0 T; 0 U; 0 Other;  
Query Match 3.3%; Score 15; DB 1; Length 15;  
Best Local Similarity 100.0%; Pred. No. 2.3e+02;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Qy 80 TTTTGCTCCCGCGC 94  
|||||  
Db 15 TTTTGCTCCCGCGC 1  
RESULT 313  
AAV27891  
ID AAV27891 standard; DNA; 18 BP.  
XX  
XX  
AC AAV27891;  
XX  
XX 25-MAR-2003 (revised)  
DT 12-OCT-1998 (first entry)  
XX  
DE Human telomerase antisense RNA primer.  
XX  
XX TP2; human; telomerase protein 2; cancer; AIDS; ageing; therapy; PCR;  
XX primer; ss.  
XX  
XX Synthetic.  
XX Homo sapiens.  
XX  
XX WO9821343-A1.  
XX  
XX 22-MAY-1998.  
PD  
XX  
PF 13-NOV-1997; 97WO-US021248.  
XX  
XX 15-NOV-1996; 96US-00751189.  
PR 11-JUN-1997; 97US-00873039.  
PR 16-OCT-1997; 97US-00951733.  
XX  
XX (AMGE-) AMGEN INC.  
PA (AMGE-) AMGEN CANADA INC.  
XX  
XX Harrington LA, Robinson MO;  
XX  
XX WPI; 1998-297946/26.  
XX  
XX New nucleic acid encoding human telomerase protein-2 - used for  
PT regulating telomerase activity, e.g. for treating cancer or acquired  
PT immune deficiency syndrome.  
XX  
XX Example 8; Page 91; 150pp; English.  
XX  
XX 2 Primers (see AAV27886 and AAV27887) are used in the PCR amplification  
CC of a 520 bp fragment of telomerase genomic DNA from HeLa cells. The PCR  
CC product was used to prepare 2 DNA constructs, each containing the T7  
CC promoter. One construct (for primers see AAV27888-89) contained DNA which  
CC would generate sense strand human telomerase RNA in a transcription  
CC reaction. The other construct (for primers see AAV27890-91) contained DNA  
CC which would generate antisense strand human telomerase RNA in a  
CC transcription reaction. The human telomerase RNA was used for in vitro  
CC assays to demonstrate that wild-type TP2 and sense telomerase RNA are  
CC required for telomerase activity. Novel TP2 can be used to develop  
CC products that regulate telomerase activity, useful e.g. for treating  
CC cancer, AIDS and ageing disorders. (Updated on 25-MAR-2003 to correct PR

CC	field.)
XX	
SQ	Sequence 18 BP; 1 A; 5 C; 10 G; 2 T; 0 U; 0 Other;
	Query Match            3.3%; Score 15; DB 1; Length 18;
	Best Local Similarity 100.0%; Pred. No. 2.9e+02;
	Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
OY	11 GGGTGGGCTGGAG 25 
Db	4 GGGTGGGCTGGAG 18 
RESULT 314	
ADK20128/c	
ID	ADK20128 standard; DNA; 20 BP.
AC	ADK20128;
XX	
DT	18-NOV-2004 (first entry)
XX	
DE	Acyl-coenzyme A synthetase 1, ACS1, antisense oligonucleotide #205.
XX	
KW	acyl-coenzyme A synthetase 1; ACS1; diabetes; obesity;
KW	metabolic syndrome X; cardiovascular disorder; cancer; infection;
KW	inflammation; tumour; antisense; ss.
OS	Synthetic.
XX	
PN	WO2004016749-A2.
XX	
PD	26-FEB-2004.
XX	
Pf	14-AUG-2003; 2003WO-US025389.
XX	
PR	14-AUG-2002; 2002US-0403591P.
XX	
PA	(PHAA ) PHARMACIA CORP.
PI	Ross SA;
XX	
DR	WPI; 2004-203782/19.
XX	
PT	New antisense compounds targeted to nucleic acid molecules encoding acyl-
PT	coenzyme A synthetase 1 (ACS1), useful for treating diseases or
PT	conditions associated with aberrant expression of ACS1, e.g. diabetes,
PT	obesity or cancer.
XX	
PS	Claim 3; SEQ ID NO 205; 940pp; English.
XX	
PI	Ross SA;
XX	
DR	WPI; 2004-203782/19.
XX	
PT	New antisense compounds targeted to nucleic acid molecules encoding acyl-
PT	coenzyme A synthetase 1 (ACS1), useful for treating diseases or
PT	conditions associated with aberrant expression of ACS1, e.g. diabetes,
PT	obesity or cancer.
XX	
PS	Claim 3; SEQ ID NO 205; 940pp; English.
XX	
CC	The invention relates to an antisense compound targeted to a nucleic acid
CC	molecule encoding acyl-coenzyme A synthetase 1 (ACS1). The antisense
CC	compound specifically hybridises with and inhibits the expression of
CC	ACS1. The antisense oligonucleotides or compounds are useful for
CC	inhibiting the expression of acyl-coenzyme A synthetase 1 (ACS1), and for
CC	treating diseases or conditions associated with aberrant expression of
CC	ACS1, e.g. diabetes, obesity, metabolic syndrome X, cardiovascular
CC	disorder or cancer. The antisense compounds are also useful as research
CC	reagents and kits, or in diagnostic, therapeutic and prophylactic
CC	applications, e.g. to prevent or delay infection, inflammation or tumour
CC	formation. The present sequence represents an acyl-coenzyme A synthetase
CC	1, ACS1, antisense oligonucleotide.
XX	
SQ	Sequence 20 BP; 3 A; 12 C; 2 G; 3 T; 0 U; 0 Other;
	Query Match            3.3%; Score 15; DB 1; Length 20;
	Best Local Similarity 100.0%; Pred. No. 3.3e+02;
	Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
OY	335 GGGCGAGGCGGAGGT 349 
Db	19 GGGCGAGGCGGAGGT 5 
RESULT 316	
AAX82232/c	
ID	AAX82232 standard; DNA; 18 BP.
XX	
AC	AAX82232;
XX	
DT	18-AUG-1999 (first entry)
XX	
DE	Influenza virus PA gene specific primer.
XX	
KW	Cold-adapted influenza virus; passage culture; PB2 protein; PB1 protein;

KW PA protein; NP protein; M protein; NS protein; NS protein; temperature sensitivity;  
 KW vaccine; flu; influenza; PCR primer; ss.  
 XX Synthetic.  
 OS Influenza virus.  
 XX WO9928445-A1.  
 XX 10-JUN-1999.  
 XX 30-NOV-1998; 98WO-KR000384.  
 XX 29-NOV-1997; 97KR-00064854.  
 XX (CHEI-) CHEIL JEDANG CORP.  
 XX Seong BL, Lee KH, Youn JW, Kim SJ, Cheoun KH, Kim J, Kim HG;  
 XX WPI; 1999-385377/32.  
 XX Cold-adapted influenza viruses useful for the production of protective  
 XX vaccines against flu.  
 XX Example 4; Page 15; 62pp; English.  
 XX The invention relates to cold-adapted influenza viruses prepared by  
 CC passage culture of A/X-31, B/Yamagata/16/88 or B/Lee/40 viruses at low  
 CC temperatures. A cDNA gene of cold-adapted influenza virus H7CA-A101 can  
 CC be selected from a group consisting of PB2 protein gene, PB1 protein  
 CC gene, PA protein gene, NP protein gene, M protein gene and NS protein  
 CC gene (AA82192-X82197). The method is useful for the production of cold-  
 CC adapted influenza virus that exhibit temperature sensitivity and can be  
 CC actively grown in fertilized eggs. The virus is useful for vaccines for  
 CC protection against 'flu. Live vaccines containing cold-adapted viruses  
 CC have several advantages over killed vaccines. It can prevent reduction of  
 CC immunogenicity, which may occur in the killed vaccine where antigenic  
 CC proteins would be denatured at its inactivation. It can also avoid  
 CC hypersensitivity due to the prolonged administration of heterologous  
 CC proteins. It promotes the immunity by inducing IGA and it can be  
 CC administered into a spray formulation via nasal cavity and thus its  
 CC application is convenient for children. It is able to inhibit the growth  
 CC of the wild-type virus and thus its therapeutic effect can be expected.  
 CC Sequences AA82222-X82257 represent PCR primers specific for the various  
 CC genes of influenza virus  
 XX  
 SX Sequence 18 BP; 8 A; 4 C; 5 G; 1 T; 0 U; 0 Other;  
 Query Match 3.3%; Score 14.8; DB 1; Length 18;  
 Best Local Similarity 88.9%; Pred. No. 3e+02; Mismatches 0; Gaps 0;  
 Matches 16; Conservative 0; Indels 2; Indels 0; Gaps 0;  
 Qy 29 TGGTGGCCATTTTGTGTC 46  
 Db 18 TGCTGGCCATTTTGTGTC 1  
 RESULT 317  
 AA224498/c  
 ID AA224498 standard; DNA; 18 BP.  
 XX  
 AC AA224498;  
 XX  
 XX 15-SEP-2003 (revised)  
 DT 18-FEB-2000 (first entry)  
 XX  
 DE H. capsulatum 5.8S rRNA gene PCR primer HC2.  
 XX  
 XX 5.8S rRNA; detection; environmental sample; public health; soil;  
 KW vegetation; dust; faeces; histoplasmosis; PCR primer; ss.  
 KW  
 XX Ajellomyces capsulatus.  
 OS  
 XX WO9954508-A1.  
 PN

XX 28-OCT-1999.  
 XX 20-APR-1999; 99WO-US008731.  
 XX 21-APR-1998; 98US-0082477P.  
 PR (USSH ) US DEPT HEALTH & HUMAN SERVICES.  
 PA Schafer MP, Reid TM;  
 XX WPI; 2000-052703/04.  
 DR A novel rapid and sensitive method using PCR for detecting Histoplasma  
 XX capsulatum in samples.  
 PT Claim 2; Page 30; 33pp; English.  
 XX This invention describes a novel rapid and sensitive method for detecting  
 CC Histoplasma capsulatum. The method uses oligonucleotide primers which  
 CC amplify a segment of DNA specific to the H. capsulatum 5.8S rRNA gene.  
 CC The method of the invention can be used to detect H. capsulatum in a wide  
 CC variety of samples. For example, for public health protection  
 CC environmental samples containing soil, vegetation, dust, decaying faeces  
 CC from birds and bats, etc. can be assayed for the presence of the  
 CC pathogen. Additionally, clinical samples drawn from human subjects may be  
 CC analysed e.g. those who are suspected of having contracted fresh  
 CC histoplasmosis as a result of symptomatology, and immune compromised  
 CC individuals who may be at risk of contracting chronic pulmonary or ocular  
 CC histoplasmosis. The prior art method used to isolate and identify H.  
 CC capsulatum is expensive and requires several weeks to complete. The  
 CC expense is increased by the number of samples required. If not enough  
 CC sample are collected, small but highly contaminated areas can be  
 CC overlooked. A need exists for a specific, sensitive, and rapid assay for  
 CC H. capsulatum. The present invention provides this need, as it is rapid,  
 CC sensitive and inexpensive. This sequence represents PCR primer HC1 which  
 CC is used in the method of detection. (Updated on 15-SEP-2003 to  
 CC standardise OS field)  
 XX  
 SX Sequence 18 BP; 3 A; 8 C; 5 G; 2 T; 0 U; 0 Other;  
 Query Match 3.3%; Score 14.8; DB 1; Length 18;  
 Best Local Similarity 88.9%; Pred. No. 3e+02; Mismatches 0; Gaps 0;  
 Matches 16; Conservative 0; Indels 2; Indels 0; Gaps 0;  
 Qy 410 CTGAGCTGTGGGACGTGC 427  
 Db 18 CTGACCGGTGGGACGTGC 1  
 RESULT 318  
 AAQ23265  
 ID AAQ23265 standard; DNA; 18 BP.  
 XX  
 AC AAQ23265;  
 XX  
 XX 23-JUL-1992 (first entry)  
 DT  
 XX Japanese type C hepatitis virus partial gene.  
 DE  
 XX HCV; probe; diagnostic; ss.  
 KW  
 XX Hepatitis C virus.  
 OS  
 XX JP04045790-A.  
 PN  
 XX 14-FEB-1992.  
 PD  
 XX 13-JUN-1990; 90JP-00154204.  
 PF  
 XX 13-JUN-1990; 90JP-00154204.  
 PR  
 XX (TOKU ) TOKUYAMA SODA KK.  
 PA

XX WPI; 1992-101941/13.  
XX  
XX Poly:nucleotide for hepatitis virus gene detection - using  
PT poly:nucleotide deoxyribonucleic acid probe, hybridising with hepatitis  
PT virus gene and detecting hybrid for diagnosis.  
XX  
XX  
XX Disclosure; Page 2; 14pp; Japanese.  
XX  
XX The polynucleotide contains the partial base sequence of the Japanese  
CC type C hepatitis virus (HCV) gene. The DNA was obtd. from the serum of a  
CC non A non B hepatitis patient. The serum was ultracentrifuged and the  
CC ppte. dissolved in a mixture of GIRC, Na citrate, sarcosine and  
CC mercaptoethanol. Phenol chloroform was added and the mixture centrifuged.  
CC Isopropanol was added to the aq. layer which was left to stand at -20 deg  
CC C for 3 hrs. then centrifuged. The ppte. was treated by GIRC and  
CC phenolchloroform and pptd. by ethanol and dissolved in dH2O to give an  
CC aq. DNA soln. The gene was amplified by PCR and the HCV gene cloned for  
CC determination of its base sequence. A genomic version of the sequence was  
CC given (AAQ23036). In the version shown there is a Y at base 189. The DNA  
CC in the specification has a guanine at this position. The DNA may be used  
CC as a probe for detection of Japanese type C hepatitis. See also AAQ23264  
XX  
XX Sequence 18 BP; 1 A; 10 C; 5 G; 0 T; 0 U; 2 Other;  
SQ

Query Match 3.2%; Score 14.6; DB 1; Length 18;  
Best Local Similarity 82.4%; Pred. No. 3.1e+02;  
Matches 14; Conservative 2; Mismatches 1; Indels 0; Gaps 0;  
QY 196 CGCCCTCCCGGGACC 212  
:|||||:|||||  
Db 2 YGCCCCCCYGGGGACC 18

RESULT 319  
ADD00949  
ID ADD00949 standard; DNA; 16 BP.  
XX  
AC ADD00949;  
XX  
DT 01-JAN-2004 (first entry)  
XX  
DE Human Jagged 2 forward PCR primer SEQ ID NO:4.  
XX  
XX apoptosis; Jagged 2 inhibitor; cytostatic; hyperproliferative disorder;  
KW human; ss; PCR primer.  
XX  
XX Synthetic.  
OS Homo sapiens.  
XX  
XX WO2003077848-A2.  
PN  
XX  
PD 25-SEP-2003.  
XX  
XX 10-MAR-2003; 2003WO-US007340.  
PF  
XX 12-MAR-2002; 2002US-00096399.  
PR  
XX (ISIS-) ISIS PHARM INC.  
PA  
XX  
XX Koller E, Shapard PJ;  
PI  
XX WPI; 2003-756943/71.  
XX  
XX Inducing apoptosis in a cell or animal for treating a subject having a  
PT condition associated with insufficient apoptosis by administering to a  
PT cell or animal a Jagged 2 inhibitor to reduce Jagged 2 levels or  
PT activity.  
XX  
XX Example 13; SEQ ID NO 4; 148pp; English.  
PS  
XX The present invention describes a method for inducing apoptosis in a cell  
CC or animal comprising administering to a cell or animal a Jagged 2

CC inhibitor to reduce Jagged 2 levels or activity. Also described: (1)  
CC treating a subject having a disease or condition associated with  
CC insufficient apoptosis by administration of a Jagged 2 inhibitor; (2) a  
CC pharmaceutical composition comprising a Jagged 2 inhibitor and another  
CC active ingredient for inducing apoptosis; and (3) a kit comprising a  
CC Jagged 2 inhibitor and instructions for using the Jagged 2 inhibitor in  
CC the induction of apoptosis. The Jagged 2 inhibitor has cytostatic  
CC activity. The method can be used for inducing apoptosis in a cell or  
CC animal for treating a subject having a disease or condition associated  
CC with insufficient apoptosis, e.g., hyperproliferative disorder. The  
CC present sequence represents a PCR primer for human Jagged 2, which is  
CC used in an example from the present invention.  
XX  
SQ Sequence 16 BP; 1 A; 7 C; 5 G; 3 T; 0 U; 0 Other;  
Query Match 3.2%; Score 14.4; DB 1; Length 16;  
Best Local Similarity 93.8%; Pred. No. 2.8e+02;  
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
QY 265 CCCGGGGCTTCTCCGG 280  
|||||:|||||  
Db 1 CCCAGGGCTTCTCCGG 16

RESULT 320  
ADH62909  
ID ADH62909 standard; DNA; 16 BP.  
XX  
AC ADH62909;  
XX  
DT 25-MAR-2004 (first entry)  
XX  
DE Human Jagged 2 DNA specific forward PCR primer.  
XX  
XX Antisense; Jagged 2; hyperproliferative disorder; cancer;  
KW developmental disorder; apoptosis; prophylaxis; antisense therapy; human;  
KW primer; PCR; ss.  
XX  
XX Homo sapiens.  
OS  
XX US2003170636-A1.  
PN  
XX 11-SEP-2003.  
PD  
XX 05-MAR-2002; 2002US-00091625.  
PF  
XX 05-MAR-2002; 2002US-00091625.  
PR  
XX (ISIS-) ISIS PHARM INC.  
PA  
XX  
XX Freier SM;  
PI  
XX WPI; 2003-898250/82.  
DR  
XX New antisense oligonucleotides for modulating Jagged 2 expression, useful  
PT for diagnosing, preventing or treating diseases or conditions associated  
PT with Jagged 2, e.g. cancer or developmental disorders.  
XX  
XX Example 13; SEQ ID NO 4; 63pp; English.  
PS  
XX The invention relates to novel antisense compounds targetted to a nucleic  
CC acid molecule encoding Jagged 2 to inhibit its expression. Antisense  
CC compounds of the invention are useful for treating an animal having a  
CC disease or condition associated with Jagged 2 e.g. hyperproliferative  
CC disorder (particularly cancer), a developmental disorder or a disease or  
CC condition that arises from aberrant apoptosis. They are also used for  
CC diagnostics, prophylaxis or as research reagents or kits. The invention  
CC is also useful in antisense therapy. The present sequence is human Jagged  
CC 2 DNA specific PCR primer. This sequence is used in the exemplification  
CC of the invention.  
XX  
SQ Sequence 16 BP; 1 A; 7 C; 5 G; 3 T; 0 U; 0 Other;

Query Match 3.2%; Score 14.4; DB 1; Length 16;  
Best Local Similarity 93.8%; Pred. NO. 2.8e+02;  
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Oy 265 CCCGGGGCTTCTCCGG 280  
||| ||||| |||||  
Db 1 CCCAGGGCTTCTCCGG 16

RESULT 321  
ADH57064  
ID ADH57064 standard; DNA; 16 BP.  
AC ADH57064;  
XX  
DT 25-MAR-2004 (first entry)  
DE PCR primer used to amplify human Jagged 2 DNA SeqID 4.  
XX human; Jagged 2; differentiation; cell fate; signalling;  
KW Usher syndrome type 1a; retinitis pigmentosa; PCR; ss; primer.  
XX  
OS Homo sapiens.  
XX  
XX US2003207839-A1.  
XX  
PD 06-NOV-2003.  
XX  
PF 13-JUN-2003; 2003US-00461668.  
XX  
PR 05-MAR-2002; 2002US-00091625.  
XX  
PA (FREI/) FREIER S M.  
XX  
PI Freier SM;  
XX  
XX WPI; 2003-864795/80.  
DR  
XX  
XX New antisense oligonucleotides of 8-40 nucleobases, useful for modulating  
PT the function of nucleic acid molecules encoding Jagged 2, ultimately  
PT modulating the amount of Jagged 2 produced.  
XX  
XX Example 13; SEQ ID NO 4; 63pp; English.  
XX  
XX This invention relates to novel antisense compounds that can be used to  
CC modulate the expression of Jagged 2. Specifically, it refers to  
CC compositions useful for inhibiting the expression of Jagged 2, a human  
CC homologue of the Drosophila Serrate gene, which is involved in  
CC differentiation and cell fate, as well as positive feedback control over  
CC signalling genes such as Notch 1, Notch 3 and Jagged 1. The Jagged 2 gene  
CC is located on chromosome 14q32, a region that has been implicated in  
CC genetic diseases including Usher syndrome type 1a that is associated with  
CC retinitis pigmentosa. The present invention describes antisense  
CC oligonucleotides that comprise at least one modified sugar moiety, a 2'-O  
CC methoxyethyl (2' MOE) and at least one modified nucleobase, a 5-  
CC methylcytosine. These compounds are useful for modulating the function of  
CC nucleic acid molecules encoding Jagged 2, ultimately modulating the  
CC amount of Jagged 2 produced, which in turn is useful for research  
CC reagents and in diagnostics. This oligonucleotide sequence is a PCR  
CC primer used to amplify human Jagged 2 DNA of the invention.  
XX  
XX Sequence 16 BP; 1 A; 7 C; 5 G; 3 T; 0 U; 0 Other;  
SO

Query Match 3.2%; Score 14.4; DB 1; Length 16;  
Best Local Similarity 93.8%; Pred. NO. 2.8e+02;  
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Oy 265 CCCGGGGCTTCTCCGG 280  
||| ||||| |||||  
Db 1 CCCAGGGCTTCTCCGG 16

RESULT 322

ACA06327  
ID ACA06327 standard; RNA; 17 BP.  
XX  
AC ACA06327;  
XX  
DT 03-JUN-2003 (first entry)  
DE  
XX  
XX NFKB sub-unit modulating inozyme substrate #146.  
XX  
XX Enzymatic nucleic acid; nuclear factor kappa B; NFKB; inozyme; zinzyme;  
KW G-cleaver; amberyzyme; cancer; REL-A activity; breast cancer; human;  
KW lung cancer; prostate cancer; colorectal cancer; brain cancer;  
KW oesophageal cancer; stomach cancer; bladder cancer; pancreatic cancer;  
KW cervical cancer; head and neck cancer; ovarian cancer; melanoma;  
KW lymphoma; glioma; multidrug resistant cancer; REL-A-specific inhibitor;  
KW chemotherapy; paclitaxel; docetaxel; cisplatin; methotrexate;  
KW cyclophosphamide; doxorubicin; fluorouracil carboplatin; edatrexate;  
KW gemcitabine; radiation therapy; inflammatory disease; asthma; diabetes;  
KW rheumatoid arthritis; restenosis; Crohn's disease; obesity; ischaemia;  
KW gene therapy; autoimmune disease; lupus; multiple sclerosis; sepsis;  
KW transplant/graft rejection; reperfusion injury; glomerulonephritis;  
KW allergic airway inflammation; inflammatory bowel disease; infection; ss.  
XX  
OS Homo sapiens.  
XX  
XX US2002177568-A1.  
XX  
PD 28-NOV-2002.  
XX  
PF 23-MAY-2001; 2001US-00864785.  
XX  
PR 07-DEC-1992; 92US-00987132.  
PR 18-MAY-1994; 94US-00245466.  
PR 15-AUG-1994; 94US-00291932.  
PR 23-DEC-1996; 96US-00777916.  
XX  
XX (STIN/) STINCHCOMB D T.  
PA (MCSW/) MCSWIGGEN J.  
PA (DRAP/) DRAPER K G.  
XX  
XX Stinchcomb DT, Mcswiggen J, Draper KG;  
DR WPI; 2003-340953/32.  
XX  
XX Novel enzymatic nucleic acid molecules which down regulates expression of  
PT a sequence encoding a subunit of nuclear factor kappa B useful for  
PT treating cancer, inflammatory disorders and autoimmune diseases.  
XX  
XX Claim 3; Page 29; 72pp; English.  
XX  
XX The invention describes an enzymatic nucleic acid molecule (I) which down  
CC regulates expression of a sequence encoding a subunit of nuclear factor  
CC kappa B (NFKB), where (I) is an inozyme, zinzyme, G-cleaver or amberyzyme  
CC configuration. The enzymatic nucleic acid molecule is adapted to treat  
CC cancer and is useful for down-regulating REL-A activity in a cell, for  
CC treating a patient having a condition associated with the level of REL-A.  
CC (I) is useful for cleaving RNA comprising a sequence of REL-A gene, in  
CC the presence of a divalent cation, especially Mg<sup>2+</sup>. The enzymatic and  
CC antisense nucleic acid molecules are useful for treating breast, lung,  
CC prostate, colorectal, brain, oesophageal, stomach, bladder, pancreatic,  
CC cervical, head and neck, ovarian cancer, melanoma, lymphoma, glioma or  
CC multidrug resistant cancer. The method involves use of other drug  
CC therapies such as monoclonal antibodies, REL-A-specific inhibitors or  
CC chemotherapy including paclitaxel, docetaxel, cisplatin, methotrexate,  
CC cyclophosphamide, doxorubicin, fluorouracil carboplatin, edatrexate,  
CC gemcitabine or radiation therapy. The enzymatic and antisense nucleic  
CC acid molecules are also useful for treating inflammatory disease such as  
CC rheumatoid arthritis, restenosis, asthma, Crohn's disease, diabetes,  
CC obesity, autoimmune disease, lupus, multiple sclerosis, transplant/graft  
CC rejection, gene therapy applications, ischaemia/reperfusion injury  
CC (central nervous system (CNS) and myocardial), glomerulonephritis,  
CC sepsis, allergic airway inflammation, inflammatory bowel disease or  
CC infection. This sequence represents the substrate of a novel enzymatic

CC nucleic acid molecule  
XX Sequence 17 BP; 0 A; 10 C; 4 G; 0 T; 3 U; 0 Other;  
SQ

Query Match 3.2%; Score 14.4; DB 1; Length 17;  
Best Local Similarity 75.0%; Pred. No. 3e+02;  
Matches 12; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

QY 131 CCTCGGCGTCGGCCT 146  
Db 1 CCUCGGCCGCGCCCU 16

RESULT 323  
ACA06326  
ID ACA06326 standard; RNA; 17 BP.  
XX  
AC ACA06326;  
XX  
DT 03-JUN-2003 (first entry)  
XX  
XX NFKB sub-unit modulating inozyme substrate #145.  
DE  
XX Enzymatic nucleic acid; nuclear factor kappa B; NFKB; inozyme; zinzyme;  
KW G-cleaver; amberzyme; cancer; REL-A activity; breast cancer; human;  
KW lung cancer; prostate cancer; colorectal cancer; brain cancer;  
KW oesophageal cancer; stomach cancer; bladder cancer; pancreatic cancer;  
KW cervical cancer; head and neck cancer; ovarian cancer; melanoma;  
KW lymphoma; glioma; multidrug resistant cancer; REL-A-specific inhibitor;  
KW chemotheraphy; paclitaxel; docetaxel; cisplatin; methotrexate;  
KW cyclophosphamide; doxorubin; fluorouracil carboplatin; edatrexate;  
KW gemcitabine; radiation therapy; inflammatory disease; asthma; diabetes;  
KW rheumatoid arthritis; restenosis; Crohn's disease; obesity; ischaemia;  
KW gene therapy; autoimmune disease; lupus; multiple sclerosis; sepsis;  
KW transplant/graft rejection; reperfusion injury; glomerulonephritis;  
KW allergic airway inflammation; inflammatory bowel disease; infection; ss.  
XX  
XX Homo sapiens.  
OS  
XX  
XX US2002177568-A1.  
PN  
XX  
XX 28-NOV-2002.  
PD  
XX  
XX 23-MAY-2001; 2001US-00864785.  
XX  
XX 07-DEC-1992; 92US-00987132.  
PR  
XX 18-MAY-1994; 94US-00245466.  
PR  
XX 15-AUG-1994; 94US-00291932.  
PR  
XX 23-DEC-1996; 96US-00777916.  
PR  
XX  
XX (STIN/) STINCHOMB D T.  
PA (MCSW/) MCSWIGGEN J.  
PA (DRAP/) DRAPER K G.  
XX  
XX Stinchcomb DT, Mcswiggen J, Draper KG;  
PI  
XX WPI; 2003-340953/32.  
XX  
XX Novel enzymatic nucleic acid molecules which down regulates expression of  
XX a sequence encoding a subunit of nuclear factor kappa B useful for  
XX treating cancer, inflammatory disorders and autoimmune diseases.  
PT  
XX  
XX Claim 3; Page 29; 72pp; English.  
PS  
XX  
XX The invention describes an enzymatic nucleic acid molecule (I) which down  
XX regulates expression of a sequence encoding a subunit of nuclear factor  
XX kappa B (NFKB), where (I) is an inozyme, zinzyme, G-cleaver or amberzyme  
XX configuration. The enzymatic nucleic acid molecule is adapted to treat  
XX cancer and is useful for down-regulating REL-A activity in a cell, for  
XX treating a patient having a condition associated with the level of REL-A.  
XX (I) is useful for cleaving RNA comprising a sequence of REL-A gene, in  
XX the presence of a divalent cation, especially Mg<sup>2+</sup>. The enzymatic and  
XX antisense nucleic acid molecules are useful for treating breast, lung,

CC prostate, colorectal, brain, oesophageal, stomach, bladder, pancreatic,  
CC cervical, head and neck, ovarian cancer, melanoma, lymphoma, glioma or  
CC multidrug resistant cancer. The method involves use of other drug  
CC therapies such as monoclonal antibodies, REL-A-specific inhibitors or  
CC chemotherapy including paclitaxel, docetaxel, cisplatin, methotrexate,  
CC cyclophosphamide, doxorubin, fluorouracil carboplatin, edatrexate,  
CC gemcitabine or radiation therapy. The enzymatic and antisense nucleic  
CC acid molecules are also useful for treating inflammatory disease such as  
CC rheumatoid arthritis, restenosis, asthma, Crohn's disease, diabetes,  
CC obesity, autoimmune disease, lupus, multiple sclerosis, transplant/graft  
CC rejection, gene therapy applications, ischaemia/reperfusion injury  
CC (central nervous system (CNS) and myocardial), glomerulonephritis,  
CC sepsis, allergic airway inflammation, inflammatory bowel disease or  
CC infection. This sequence represents the substrate of a novel enzymatic  
XX nucleic acid molecule  
SQ Sequence 17 BP; 0 A; 11 C; 3 G; 0 T; 3 U; 0 Other;  
XX

Query Match 3.2%; Score 14.4; DB 1; Length 17;  
Best Local Similarity 75.0%; Pred. No. 3e+02;  
Matches 12; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

QY 131 CCTCGGCGTCGGCCT 146  
Db 2 CCUCGGCCGCGCCCU 17

RESULT 324  
ADI83554  
ID ADI83554 standard; RNA; 17 BP.  
XX  
AC ADI83554;  
XX  
DT 03-JUN-2004 (first entry)  
XX  
XX HCV DNAzyme substrate sequence #800.  
DE  
XX  
XX ss; enzymatic nucleic acid; RNA cleavage; hepatitis C virus; HCV;  
KW HCV infection; type I interferon; DNAzyme.  
XX  
XX Hepatitis C virus.  
OS  
XX  
XX US2003125270-A1.  
PN  
XX  
XX 03-JUL-2003.  
PD  
XX  
XX 18-DEC-2000; 2000US-00740332.  
PR  
XX  
XX 18-DEC-2000; 2000US-00740332.  
PR  
XX  
XX (BLAT/) BLATT L.  
PA (MCSW/) MCSWIGGEN J.  
PA (ROBE/) ROBERTS E.  
PA (PAVC/) PAVCO P A.  
PA (WACE/) MACEJACK D.  
XX  
XX Blatt L, Mcswiggen J, Roberts E, Pavco PA, Macejack D;  
PI  
XX WPI; 2004-031273/03.  
XX  
XX Enzymatic nucleic acid molecules which specifically cleave RNA derived  
XX from hepatitis C virus (HCV), useful for the treatment of HCV infections,  
XX especially in combination with type I interferon therapy.  
PT  
XX  
XX Claim 1; SEQ ID NO 800; 198pp; English.  
PS  
XX  
XX The invention relates to an enzymatic nucleic acid molecule which  
XX specifically cleaves RNA derived from hepatitis C virus (HCV), in which  
XX the binding arms of the enzymatic nucleic acid molecule comprises  
XX sequences complementary to any of the defined substrate sequences given  
XX in the specification. The nucleic acid molecule may be administered for  
XX the treatment of HCV infections, especially in combination with type I  
XX interferons. The present sequence represents a HCV DNAzyme substrate

```
CC sequence.
SQ Sequence 17 BP; 5 A; 6 C; 4 G; 0 T; 1 U; 1 Other;

Query Match      3.2%; Score 14.4; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 3e+02;
Matches 14; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

Qy 432 AGGACTCGGCTCACACA 448
Db 1 AGGACUNGCCCCACACA 17

RESULT 325
AAA63120
ID AAA63120 standard; DNA; 18 BP.
XX
AC AAA63120;
XX
DT 07-DEC-2000 (first entry)
XX
DE Antisense oligonucleotide for use in RNase H mapping assay SEQ ID NO: 24.
XX
KW Immunoregulator; antisense oligonucleotide; cancer; tumour cell vaccine;
KW rheumatoid arthritis; autoimmune disease; diabetes mellitus; thyroiditis;
KW ss.
XX
OS Mus sp.
XX
PN WO200034467-A1.
XX
PD 15-JUN-2000.
XX
PF 24-NOV-1999; 99WO-US028096.
XX
PR 04-DEC-1998; 98US-00205995.
XX
PA (ANTI-) ANTIGEN EXPRESS INC.
XX
PI Xu M, Qiu G, Humphreys R;
XX
WPI; 2000-423417/36.
XX
DR Cancer cell vaccine for treating malignancies, autoimmune disorders and
PT isolating autodeterminant peptides comprises a regulator of invariant
PT chain protein expression or immunoregulatory function.
XX
PS Example 1; Page 46; 94pp; English.
XX
CC The present sequence is an antisense oligonucleotide which was used in an
CC RNase mapping experiment. This enables the identification of sites within
CC the II RNA strand which hybridise to antisense DNA. These sites can then
CC be used as targets for antisense strands which may, using gene therapy,
CC be used as tumour cell vaccines (for example to treat carcinomas, lung,
CC melanoma, leukaemia, lymphomas, stomach, breast, colon or rectum, lung,
CC prostate, bladder, pancreas, brain and ovarian cancers), or they can be
CC used to treat autoimmune diseases including rheumatoid arthritis,
CC diabetes mellitus and thyroiditis
XX
SQ Sequence 18 BP; 3 A; 7 C; 6 G; 2 T; 0 U; 0 Other;

Query Match      3.2%; Score 14.4; DB 1; Length 18;
Best Local Similarity 93.8%; Pred. No. 3.2e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 220 GGTGCGCTGCCAGCC 235
Db 1 GGTGCGCTGCCAGCC 16

RESULT 326
AAD47637/C
ID AAD47637 standard; DNA; 19 BP.
```

```
XX
AC AAD47637;
XX
DT 24-FEB-2003 (first entry)
XX
DE Forward primer, to construct human KSGamma2h antibody expression vector.
XX
KW Immunoglobulin; Ig; antibody; immunocytokine; immunofusion; immunoligand;
KW protease resistance; PCR; primer; ss.
XX
OS Unidentified.
XX
PN WO200272605-A2.
XX
PD 19-SEP-2002.
XX
PF 07-MAR-2002; 2002WO-US007011.
XX
PR 07-MAR-2001; 2001US-0274096P.
XX
PA (LEXI-) LEXIGEN PHARM CORP.
XX
PI Gillies SD, Way J;
XX
DR WPI; 2003-018726/01.
XX
CC New fusion protein, useful for producing antibodies, immunocytokines or
CC Fc fusion proteins that enhance the expression or protease resistance of
CC a fusion protein, comprises an immunoglobulin (Ig) moiety fused to a non-
CC Ig moiety.
XX
PS Example 5; Page 63; 71pp; English.
XX
CC The present invention relates to methods and compositions for efficiently
CC expressing antibody fusion proteins. The invention also relates to novel
CC fusion proteins comprising an immunoglobulin (Ig) moiety fused to a non-
CC immunoglobulin moiety where the immunoglobulin moiety comprises a first
CC domain from a first antibody isotype and a second domain from a second
CC antibody isotype. The antibodies or Ig fusion proteins are useful to
CC produce intact antibodies, immunocytokines, immunofusions, immunoligands
CC and other antibody and Fc fusion proteins that enhance the expression,
CC proper oligomerisation, purification and protease resistance of desired
CC fusion proteins, optionally with modified, combined or decreased Fc
CC effector functions. The present sequence is a PCR primer which is used to
CC construct human KSGamma2h antibody expression vector. This sequence is
CC used in the exemplification of the invention
XX
SQ Sequence 19 BP; 5 A; 7 C; 3 G; 4 T; 0 U; 0 Other;

Query Match      3.2%; Score 14.4; DB 1; Length 19;
Best Local Similarity 93.8%; Pred. No. 3.4e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 300 GAAGAGTTGGGCTCTG 315
Db 19 GAAGATTGGGCTCTG 4

RESULT 327
AAF57369/C
ID AAF57369 standard; DNA; 17 BP.
XX
AC AAF57369;
XX
DT 11-JUN-2001 (first entry)
XX
DE Murine Cdc25A intron 7/exon 8 splice junction sequence.
XX
KW Cdc25; Cdc25 phosphatase; transcription; modulator; murine; Cdc25A; exon;
KW intron; ds.
XX
OS Mus sp.
XX
```

PN WO200120034-A2.  
XX 22-MAR-2001.  
PD 11-SEP-2000; 2000WO-US024838.  
XX 13-SEP-1999; 99US-0153639P.  
PF (BADI ) BASF AG.  
XX Voss J, Timm J;  
PI WPI; 2001-244825/25.  
XX Assay for screening modulators of Cdc25 activity by using a cell having a  
XX recombinant Cdc25 phosphatase gene whose expression alters the  
PT transcription of a selected gene in the presence of a modulator.  
XX Example 1; Page 15; 55pp; English.  
PS The invention relates to a method of identifying a modulator of Cdc25  
XX activity that comprises contacting a test cell having a recombinant Cdc25  
CC phosphatase gene whose expression alters transcription of a selected  
CC gene, with a compound under conditions where recombinant Cdc25  
CC phosphatase gene is expressed and alters the transcription of a selected  
CC gene as an indication of the compound being a modulator of Cdc25-mediated  
CC transcription. The method is useful for identifying modulators of Cdc25  
CC activity. Sequences AAF57363-376 represent intron/exon splice junction  
CC sequences of the murine Cdc25A gene  
XX  
XX Sequence 17 BP; 4 A; 3 C; 4 G; 6 T; 0 U; 0 Other;  
SQ  
Query Match 3.1%; Score 14; DB 1; Length 17;  
Best Local Similarity 100.0%; Pred. No. 3.3e+02;  
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 155 TCATTCTAGAGCAA 168  
DB 15 TCATTCTAGAGCAA 2  
RESULT 328  
AAC91135  
ID AAC91135 standard; DNA; 17 BP.  
XX AC AAC91135;  
XX 20-MAR-2001 (first entry)  
DT Fungal pathogenic species identification probe #21.  
XX Fungal pathogenic; Internal Transcribed Spacer; ITS;  
XX opportunistic infection; ss.  
XX Unidentified.  
OS  
XX WO200073499-A2.  
XX 07-DEC-2000.  
XX 24-MAY-2000; 2000WO-EP004714.  
XX 28-MAY-1999; 99EP-00870109.  
XX 11-JUN-1999; 99US-0138621P.  
XX (INNO-) INNOGENETICS NV.  
PA (IRBI-) ENTERPRISE IRELAND T/A BIORESEARCH IRELA.  
XX Smith T, Maher M, Martin C, Jannes G, Roseau R, Van Der Weide M;  
XX WPI; 2001-061555/07.  
XX Detecting and identifying fungal pathogens, especially Candida.

PT Cryptococcus and Aspergillus, comprises hybridizing the amplified nucleic  
XX acid of the fungal pathogen with a probe from the internal transcribed  
PT spacer region of a DNA.  
XX Claim 1; Page 46; 59pp; English.  
XX The present invention relates to detecting and identifying fungal  
CC pathogenic species in a sample. The method involves hybridizing a nucleic  
CC acid of a fungal pathogen possibly present in the sample with at least  
CC one oligonucleotide probe, from an Internal Transcribed Spacer (ITS)  
CC region. The method is useful for simultaneous detection and  
CC differentiation of clinically important fungi in a single assay.  
CC particularly Candida albicans, C. parapsilosis, C. tropicalis, C. kefyr,  
CC C. krusei, C. glabrata, C. dubliniensis, Aspergillus flavus, A.  
CC versicole, A. nidulans, A. fumigatus, C. neoformans and pneumocystis  
CC carinii. The method is especially useful in the detection of  
CC opportunistic infections in patients with impaired immunity systems, such  
CC as organ transplant patients, patients receiving intensive anticancer  
CC treatments, diabetics or AIDS patients  
XX  
XX Sequence 17 BP; 1 A; 7 C; 7 G; 2 T; 0 U; 0 Other;  
SQ  
Query Match 3.1%; Score 14; DB 1; Length 17;  
Best Local Similarity 100.0%; Pred. No. 3.3e+02;  
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 328 CTCTCGGGGGCGAG 341  
DB 2 CTCTCGGGGGCGAG 15  
RESULT 329  
AAV81598  
ID AAV81598 standard; DNA; 17 BP.  
XX AC AAV81598;  
XX 11-MAY-1999 (first entry)  
DT Oligonucleotide used in PNA-DNA-PNA chimeric macromolecule.  
XX PNA; peptide nucleic acid; nuclease resistance; diagnostic; ss.  
XX Synthetic.  
OS  
XX WO9514706-A1.  
XX 01-JUN-1995.  
XX 23-NOV-1994; 94WO-US013523.  
XX 24-NOV-1993; 93US-00158352.  
XX (ISIS-) ISIS PHARM INC.  
XX Cook PD;  
PI  
XX WPI; 1995-206893/27.  
XX New chimeric macromolecules contg. DNA and peptide nucleic acid segments  
XX - with good nuclease stability and binding affinity, also activating  
PT RNaseH, useful for treating disease, in diagnosis and for identifying  
PT chemotherapeutic agents.  
XX Disclosure; Page 50; 68pp; English.  
XX The patent discloses new macromolecules of formula PNA-DNA-PNA, in which  
CC DNA comprises at least one 2'-deoxynucleotide and each PNA comprises at  
CC least one peptide nucleic acid subunit. These compounds have increased  
CC resistance to nuclease and increased specific binding affinity, and they  
CC can activate RNaseH for target strand cleavage. They can hybridise  
CC specifically to a nucleic acid strand (especially RNA) and are useful (1)  
CC for treating diseases associated with undesirable production of protein,



CC (2) for in-vitro modification of sequence-specific nucleic acid (by  
 CC contacting a test solution with the macromolecule and RNaseH), or (3) for  
 CC in-vivo enhancement of polynucleotide hybridisation and RNase activity.  
 CC They can also be used diagnostically and for screening chemotherapeutic  
 CC agents

XX SQ Sequence 17 BP; 2 A; 5 C; 3 G; 7 T; 0 U; 0 Other;

Query Match 3.1%; Score 13.8; DB 1; Length 17;  
 Best Local Similarity 88.2%; Pred. No. 3.4e+02;  
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 102 TTCTCGTGCATTTTCAG 118  
 ||||| |||||  
 Db 1 TTCTCGTGCATTTTCAG 17

## RESULT 330

AA62951  
 ID AAX62951 standard; RNA; 17 BP.

XX AC AAX62951;

XX DT 16-JUL-1999 (first entry)

XX DE Delta-9 desaturase hamerhead ribozyme target SEQ ID NO:826.

XX KW Maize; corn; Zea mays; delta-9 desaturase; GBSS; target; substrate;  
 KW granule bound starch synthase; hamerhead ribozyme; hairpin ribozyme;  
 KW modulation; gene expression; transgenic plant; cleavage; canola plant;  
 KW caffeine synthesis; coffee plant; nicotine production; tobacco;  
 KW fruit ripening; flower pigmentation; lignin production; ss.

XX OS Zea mays.

XX PN WO9710328-A2.

XX PD 20-MAR-1997.

XX PF 12-JUL-1996; 96WO-US011689.

XX PR 13-JUL-1995; 95US-0001135P.

XX PA (RIBO-) RIBOZYME PHARM INC.

XX PA (DOWC ) DOWELANCO.

XX FI Zwick MG, Edington BE, Mcswiggen JA, Merlo PAO, Guo L, Skokut TA;  
 XX Young SA, Folkerts O, Merlo DJ;

XX DR WPI; 1997-202224/18.

XX PT Ribozyme which modulates plant gene expression - preferably modulates  
 PT expression of DELTA-9 desaturase or granule bound starch synthase in  
 PT maize or canola.

XX PS Claim 38; Page 86; 155pp; English.

XX CC The present invention describes an enzymatic nucleic acid molecule (I)  
 CC with RNA cleaving activity, which modulates the expression of a plant  
 CC gene. Also described is a gene comprising a cDNA sequence encoding maize  
 CC Delta-9 desaturase. (I) can be used to modulate expression of a gene,  
 CC preferably Delta-9 desaturase or a granule bound starch synthase (GBSS)  
 CC gene, in a plant (preferably a maize or canola plant). (I) can be used to  
 CC modulate caffeine synthesis in a coffee plant, nicotine production in a  
 CC tobacco plant, fruit ripening processes in an apple, tomato, pear, plum  
 CC or peach plant, flower pigmentation in a rose, petunia, chrysanthemum or  
 CC marigold plant or lignin production in a tobacco, aspen, poplar or pine  
 CC plant

XX SQ Sequence 17 BP; 1 A; 6 C; 5 G; 0 T; 5 U; 0 Other;

Query Match 3.1%; Score 13.8; DB 1; Length 17;  
 Best Local Similarity 64.7%; Pred. No. 3.4e+02;

Matches 11; Conservative 4; Mismatches 2; Indels 0; Gaps 0;

Qy 106 CGCTGACTTTCAGCGG 122

||||| :|||

Db 1 CGCUGCCUUCAGCUGG 17

## RESULT 331

ABL46697/C  
 ID ABL46697 standard; RNA; 17 BP.

XX AC ABL46697;

XX DT 27-JUN-2003 (first entry)

XX DE Human GRID NCH ribozyme substrate oligonucleotide #151.

XX KW Human; Grb2-related with Insert Domain; GRID; T-cell;  
 KW co-stimulatory adaptor protein; tissue rejection; graft rejection;  
 KW leukaemia; cytostatic; ss.

XX OS Homo sapiens.

XX PN WO200162911-A2.

XX PD 30-AUG-2001.

XX PF 23-FEB-2001; 2001WO-US005957.

XX PR 24-FEB-2000; 2000US-0184594P.

XX PA (RIBO-) RIBOZYME PHARM INC.

XX PA (GLAX ) GLAXO GROUP LTD.

XX PI Jarvis T, Von Carlowitz I, Mcswiggen JA, Hamblin PA, Ellis JH;

XX DR WPI; 2001-550088/61.

XX PT New nucleic acid(s) for regulating the Grb2-related with Insert Domain  
 PT (GRID) gene comprises using antisense and enzymatic nucleic acid  
 PT molecules such as hammerhead ribozymes.

XX PS Claim 4; Page 65; 108pp; English.

XX CC The present invention relates to oligonucleotides that downregulate the  
 CC expression of human Grb2-related with Insert Domain (GRID) gene. GRID is  
 CC a T-cell co-stimulatory adaptor protein. The oligonucleotides are useful  
 CC for modulating the expression of GRID, to treat conditions such as  
 CC tissue/graft rejection and leukaemia. The oligonucleotides can also be  
 CC administered in conjunction with other therapies such as radiation,  
 CC chemotherapy and cyclosporin treatment. The present oligonucleotide was  
 CC used to illustrate the invention

XX SQ Sequence 17 BP; 3 A; 4 C; 9 G; 0 T; 1 U; 0 Other;

Query Match 3.1%; Score 13.8; DB 1; Length 17;  
 Best Local Similarity 88.2%; Pred. No. 3.4e+02;  
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 200 CCTCCCGGGGACCTGCG 216

||||| |||||

Db 17 CCTCCCTGGGACCTCCG 1

## RESULT 332

ABL46496/C  
 ID ABL46496 standard; RNA; 17 BP.

XX AC ABL46496;

XX DT 27-JUN-2003 (first entry)

XX DE Human GRID hammerhead ribozyme substrate oligonucleotide #129.

XX Human; Grb2-related with Insert Domain; GRID; T-cell;  
KW co-stimulatory adaptor protein; tissue rejection; graft rejection;  
KW leukaemia; cytostatic; ss.  
XX Homo sapiens.  
XX WO200162911-A2.  
XX 30-AUG-2001.  
XX 23-FEB-2001; 2001WO-US005957.  
XX 24-FEB-2000; 2000US-0184594P.  
XX (RIBO-) RIBOZYME PHARM INC.  
PA (GLAX ) GLAXO GROUP LTD.  
XX Jarvis T, Von Carlowitz I, Mcswiggen JA, Hamblin PA, Ellis JH;  
XX WPI; 2001-550088/61.  
XX New nucleic acid(s) for regulating the Grb2-related with Insert Domain  
PT (GRID) gene comprises using antisense and enzymatic nucleic acid  
PT molecules such as hammerhead ribozymes.  
XX Claim 4; Page 61; 108pp; English.  
XX The present invention relates to oligonucleotides that downregulate the  
CC expression of human Grb2-related with Insert Domain (GRID) gene. GRID is  
CC a T-cell co-stimulatory adaptor protein. The oligonucleotides are useful  
CC for modulating the expression of GRID, to treat conditions such as  
CC tissue/graft rejection and leukaemia. The oligonucleotides can also be  
CC administered in conjunction with other therapies such as radiation,  
CC chemotherapy and cyclosporin treatment. The present oligonucleotide was  
CC used to illustrate the invention  
XX  
SQ Sequence 17 BP; 3 A; 5 C; 8 G; 0 T; 1 U; 0 Other;  
Query Match 3.1%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 3.4e+02;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 201 CTCCTGGGACCTCGG 217  
Db 17 CTCCTGGGACCTCGG 1  
RESULT 333  
ABK19302/c  
XX ABK19302 standard; RNA; 17 BP.  
XX AC ABK19302;  
XX 09-APR-2002 (first entry)  
XX Human ERG Amberzyme target sequence Seq ID No 1949.  
XX  
DE Human; hammerhead ribozyme; cytostatic; antitumour; antidiabetic;  
KW ophthalmological; antiarthritic; antipsoriatic; virucide; osteopathic;  
KW vulnary; cancer; lymphoma; Ewing's sarcoma; melanoma; psoriasis;  
KW tumour angiogenesis; diabetic retinopathy; macular degeneration;  
KW neovascular glaucoma; myopic degeneration; arthritis; verruca vulgaris;  
KW angiofibroma of tuberosus sclerosis; port-wine stain; wound healing;  
KW Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; leukaemia; ss;  
KW Osler-Weber-rendu syndrome; leukaemia; osteoporosis; DNAzyme; inozyme;  
XX amberzyme.  
XX Homo sapiens.  
XX WO200188124-A2.  
XX 22-NOV-2001.

XX 16-MAY-2001; 2001WO-US015866.  
XX 16-MAY-2000; 2000US-00572021.  
XX (RIBO-) RIBOZYME PHARM INC.  
PA (GLAX ) GLAXO GROUP LTD.  
XX Jarvis T, Von Carlowitz I, Mcswiggen JA, McLaughlin F, Randi AM;  
XX WPI; 2002-082995/11.  
XX Novel polynucleotide which down regulates expression of Ets-related gene,  
PT useful for treating cancer, diabetic retinopathy, macular degeneration,  
PT arthritis, psoriasis, verruca vulgaris and Sturge Weber syndrome.  
XX Claim 4; Page 125; 149pp; English.  
XX The invention relates to a nucleic acid molecule (I) which down regulates  
CC expression of an Ets-related gene (ERG). (I) is useful for treating  
CC conditions selected from cancer, lymphoma, Ewing's sarcoma, melanoma,  
CC tumour angiogenesis, diabetic retinopathy, macular degeneration,  
CC neovascular glaucoma, myopic degeneration, arthritis, psoriasis, verruca  
CC vulgaris, angiofibroma of tuberosus sclerosis, port-wine stains, Sturge  
CC Weber syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-rendu  
CC syndrome, leukaemia, osteoporosis and wound healing. (I) is useful for  
CC treating a patient having a condition associated with the level of ERG,  
CC by contacting cells of the patient with (I) under conditions suitable for  
CC the treatment. The method comprises the use of one or more therapies  
CC under conditions suitable for the treatment. Leukaemia or tumour  
CC angiogenesis is treated by administering (I) to the patient in  
CC conjunction with one or more of other therapies such as radiation or  
CC chemotherapy treatment. (I) is useful for reducing ERG activity in a  
CC cell, by contacting the cell with (I). (I) is useful for cleaving RNA of  
CC ERG gene, by contacting (I) with RNA, in the presence of a divalent  
CC cation such as Mg2+. (I) is useful for diagnosis of conditions and  
CC diseases related to the expression of ERG, and as diagnostic tool to  
CC examine genetic drift and mutations within diseased cells or to detect  
CC the presence of ERG RNA in a cell. (I) is useful for specifically  
CC targeting genes that share homology with ERG gene or ERG fusion genes.  
CC ABK17354-ABK22719 represent nucleic acids, including antisense and  
CC enzymatic nucleic acid molecules which regulate expression of ERG, and  
CC related PCR primers of the invention  
XX  
SQ Sequence 17 BP; 1 A; 5 C; 6 G; 0 T; 5 U; 0 Other;  
Query Match 3.1%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 3.4e+02;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 124 GGAAAAGCCTCGCCTG 140  
Db 17 GGAAAAGCCTCGCCAG 1  
RESULT 334  
ADA99825  
ID ADA99825 standard; DNA; 17 BP.  
XX AC ADA99825;  
XX 20-NOV-2003 (first entry)  
XX Human MDZ3 scanning oligonucleotide SEQ ID 814.  
DE  
XX Cytostatic; immunostimulant; gene therapy; vaccine; human;  
KW zinc finger protein; MDZ3; MDZ4; MDZ7; MDZ12; chromosome 7q22.1;  
KW chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer;  
KW developmental disorder; ss.  
XX Homo sapiens.  
XX EP1281758-A2.  
PN

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XX PD 05-FEB-2003.
XX XX
XX PF 30-JUL-2002; 2002EP-00016874.
XX XX
XX PR 02-AUG-2001; 2001US-00922181.
XX XX
XX PA (ABOM-) ABOMICA INC.
XX XX
XX PI Shannon M, Gu Y, Nguyen C;
XX XX
XX DR WPI; 2003-423107/40.
XX XX
XX PT New zinc finger-containing proteins and nucleic acids, useful in
XX PT manufacturing a medicament for treating or preventing a disorder
XX PT associated with decreased or increased expression or activity of MD23,
XX PT MD24, MD27 or MD212, e.g. cancer.
XX XX
XX PS Example 8; SEQ ID NO 814; 103pp; English.
XX XX
XX CC The present invention relates to novel human zinc finger-containing
XX CC proteins and their coding sequences: MD23, MD24, MD27, MD212. MD23 is
XX CC encoded at chromosome 7q22.1, MD24 is encoded at chromosome 6p21.3-22.2,
XX CC MD27 is encoded at chromosome 16p11.2 and MD212 is encoded at chromosome
XX CC 15q26.1. The MD23, MD24, MD27, and MD212 sequences are useful in therapy,
XX CC or in manufacturing a medicament for treating or preventing a disorder
XX CC associated with decreased or increased expression or activity of MD23,
XX CC MD24, MD27, or MD212, e.g. cancer or developmental disorders. The nucleic
XX CC acids and proteins are also useful for diagnosing or monitoring a disease
XX CC caused by altered expression of MD23, MD24, MD27, or MD212. The nucleic
XX CC acids can also be used as probes to detect and characterize gross
XX CC alterations in MD23, MD24, MD27, or MD212 genetic locus. The probes are
XX CC useful in constructing microarrays for measuring gene expression. The
XX CC proteins are useful as therapeutic agents for gene therapy or as
XX CC vaccines. The present sequence was used to illustrate the invention.
XX XX
XX SQ Sequence 17 BP; 2 A; 2 C; 8 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 3.1%; Score 13.8; DB 1; Length 17;
XX Best Local Similarity 88.2%; Pred. No. 3.4e+02;
XX Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
Oy 24 AGGGGTGGTGCCATT 40
Db ||||| |||||
1 AGGGGTGGTGCCATT 17

RESULT 335
ACD58382
ID ACD58382 standard; RNA; 17 BP.
XX
XX AC ACD58382;
XX
XX DT 24-SEP-2003 (first entry)
XX
XX DE HCV DNzyme substrate sequence #800.
XX
XX KW Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;
XX KW RNA stability; RNA expression; RNA synthesis; antisense;
XX KW enzymatic nucleic acid; hammerhead ribozyme; DNzyme; inozyme; zinzyme;
XX KW amberyne; G-cleaver ribozyme; decoy molecule; aptamer;
XX KW HBV reverse transcriptase; Enhancer I region; viral replication;
XX KW degenerative; disease state; HBV infection; HCV infection; cirrhosis;
XX KW liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
XX KW virucide; antiinflammatory; substrate; ss.
XX
XX OS Hepatitis C virus.
XX
XX PN WO200281494-A1.
XX
XX PD 17-OCT-2002.
XX
XX PF 26-MAR-2002; 2002WO-US009187.

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XX PR 26-MAR-2001; 2001US-00817879.
XX PR 08-JUN-2001; 2001US-00877478.
XX PR 08-JUN-2001; 2001US-0296876P.
XX PR 24-OCT-2001; 2001US-0335059P.
XX PR 05-DEC-2001; 2001US-0337055P.
XX
XX PA (RIBO-) RIBOZYME PHARM INC.
XX PA (BLAT/) BLATT L.
XX PA (MACE/) MACEJAK D.
XX PA (MCSW/) MCSWIGGEN J.
XX PA (MORR/) MORRISSEY D.
XX PA (PAVC/) PAVCO P.
XX PA (LEEP/) LEE P.
XX PA (DRAP/) DRAPER K.
XX PA (ROBE/) ROBERTS E.
XX
XX PI Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;
XX PI Draper K, Roberts E;
XX
XX DR WPI; 2003-229207/22.
XX
XX PT Novel compound useful for treating cirrhosis, liver failure,
XX PT hepatocellular carcinoma, or condition associated with hepatitis C virus
XX PT infection.
XX
XX PS Claim 1; Page 248; 387pp; English.
XX
XX CC The present invention relates to nucleic acid molecules which modulate
XX CC the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
XX CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
XX CC and enzymatic nucleic acids such as hammerhead ribozymes, DNzymes,
XX CC inozymes, zinzymes, amberyne, and G-cleaver ribozymes. Also disclosed
XX CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse
XX CC transcriptase and/or HBV reverse transcriptase primer sequences, as well
XX CC as oligonucleotides that specifically bind the Enhancer I region of HBV
XX CC DNA. The nucleic acids may be used to modulate the expression of HBV
XX CC genes and HBV viral replication. Also disclosed is a method for screening
XX CC compounds and/or potential therapies directed against HBV, and compounds
XX CC that modulate the expression and/or replication of HCV. The compounds and
XX CC methods of the invention are useful for the treatment of degenerative and
XX CC disease states related to HBV and HCV infection, replication and gene
XX CC expression such as cirrhosis, liver failure, and hepatocellular
XX CC carcinoma. The present sequence represents a substrate for one of the HCV
XX CC DNzyme or minus strand DNzyme sequences disclosed in the present
XX CC invention
XX
XX SQ Sequence 17 BP; 5 A; 6 C; 5 G; 0 T; 1 U; 0 Other;
XX
XX Query Match 3.1%; Score 13.8; DB 1; Length 17;
XX Best Local Similarity 82.4%; Pred. No. 3.4e+02;
XX Matches 14; Conservative 1; Mismatches 2; Indels 0; Gaps 0;
XX
Oy 432 AGGACTCGGCTCACACA 448
Db |||||: ||||| |||||
1 AGGACUGGGCCACACA 17

RESULT 336
ACD63046/C
ID ACD63046 standard; RNA; 17 BP.
XX
XX AC ACD63046;
XX
XX DT 24-SEP-2003 (first entry)
XX
XX DE HCV minus strand DNzyme substrate sequence #853.
XX
XX KW Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;
XX KW RNA stability; RNA expression; RNA synthesis; antisense;
XX KW enzymatic nucleic acid; hammerhead ribozyme; DNzyme; inozyme; zinzyme;
XX KW amberyne; G-cleaver ribozyme; decoy molecule; aptamer;
XX KW HBV reverse transcriptase; Enhancer I region; viral replication;
XX KW liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
XX KW virucide; antiinflammatory; substrate; ss.
XX
XX OS Hepatitis C virus.
XX
XX PN WO200281494-A1.
XX
XX PD 17-OCT-2002.
XX
XX PF 26-MAR-2002; 2002WO-US009187.

```

KW degenerative; disease state; HBV infection; HCV infection; cirrhosis;  
 KW liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;  
 KW virucide; antiinflammatory; substrate; ss.  
 XX Hepatitis C virus.  
 OS  
 PN WO200281494-A1.  
 XX  
 PD 17-OCT-2002.  
 XX  
 XX 26-MAR-2002; 2002WO-US009187.  
 PF  
 XX  
 XX 26-MAR-2001; 2001US-00817879.  
 PR  
 PR 08-JUN-2001; 2001US-00877478.  
 PR 08-JUN-2001; 2001US-0296876P.  
 PR 24-OCT-2001; 2001US-0335059P.  
 PR 05-DEC-2001; 2001US-0337055P.  
 XX  
 XX (RIBO-) RIBOZYME PHARM INC.  
 PA (BLAT/) BLATT L.  
 PA (MACE/) MACEJAK D.  
 PA (MCSW/) MCSWIGGEN J.  
 PA (MORR/) MORRISSEY D.  
 PA (PAVC/) PAVCO P.  
 PA (LEBP/) LEE P.  
 PA (DRAP/) DRAPER K.  
 PA (ROBE/) ROBERTS E.  
 XX  
 XX Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;  
 PI Draper K, Roberts E;  
 PI  
 XX WPI; 2003-229207/22.  
 DR  
 XX  
 XX Novel compound useful for treating cirrhosis, liver failure,  
 PT hepatocellular carcinoma, or condition associated with hepatitis C virus  
 PT infection.  
 PT  
 XX  
 XX Claim 1; Page 290; 387pp; English.  
 PS  
 XX The present invention relates to nucleic acid molecules which modulate  
 CC the synthesis, expression and/or stability of Hepatitis C virus (HCV) or  
 CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense  
 CC and enzymatic nucleic acids such as hammerhead ribozymes, DNazymes,  
 CC inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed  
 CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse  
 CC transcriptase and/or HBV reverse transcriptase primer sequences, as well  
 CC as oligonucleotides that specifically bind the Enhancer I region of HBV  
 CC DNA. The nucleic acids may be used to modulate the expression of HBV  
 CC genes and HBV viral replication. Also disclosed is a method for screening  
 CC compounds and/or potential therapies directed against HBV, and compounds  
 CC that modulate the expression and/or replication of HCV. The compounds and  
 CC methods of the invention are useful for the treatment of degenerative and  
 CC disease states related to HBV and HCV infection, replication and gene  
 CC expression such as cirrhosis, liver failure, and hepatocellular  
 CC carcinoma. The present sequence represents a substrate for one of the HCV  
 CC DNazyme or minus strand DNazyme sequences disclosed in the present  
 CC invention  
 XX  
 XX Sequence 17 BP; 3 A; 11 C; 2 G; 0 T; 1 U; 0 Other;  
 SQ  
 Query Match 3.1%; Score 13.8; DB 1; Length 17;  
 Best Local Similarity 88.2%; Pred. No. 3.4e+02;  
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 20 TGGAGGGGTGGTGGCC 36  
 Db 17 TGGAGGGGTGGTGGCC 1  
 RESULT 337  
 ACC68615/C  
 ID ACC68615 standard; DNA; 17 BP.  
 XX

ACC68615;  
 01-JUL-2003 (first entry)  
 Murine oligonucleotide associated with tumour suppression, SEQ ID 5862.  
 Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; murine;  
 tumour suppression; tumour reversion; apoptosis; virus resistance;  
 viral disease; tumour; cell degeneration; cancer; Alzheimer's disease;  
 schizophrenia; ss.  
 Mus musculus.  
 WO2003025176-A2.  
 27-MAR-2003.  
 17-SEP-2002; 2002WO-IB004210.  
 17-SEP-2001; 2001FR-00011979.  
 (MOLE-) MOLECULAR ENGINES LAB.  
 Telerman A, Amson R, Tuijnder M;  
 WPI; 2003-333167/31.  
 New isolated nucleic acid, useful for treating viral diseases associated  
 with tumors and cell degeneration, also related polypeptides, antibodies  
 and transfected cells.  
 Disclosure; Page 716; 738pp; French.  
 The present invention relates to murine oligonucleotides (ACC62754-  
 ACC68806), which are associated with tumour suppression, tumour  
 reversion, apoptosis and virus resistance. The oligonucleotides are  
 useful as (1) as probes and primers for detecting, identifying,  
 quantifying and/or amplifying nucleic acid, e.g. as one component of a  
 gene chip; in vitro as (anti)sense reagents; and (2) for production of a  
 recombinant polypeptides. The oligonucleotides are useful for preparation  
 of pharmaceuticals for prevention and/or treatment of viral diseases that  
 are characterised by development of tumours or cell degeneration,  
 specifically cancer but also Alzheimer's disease and schizophrenia  
 Sequence 17 BP; 1 A; 6 C; 2 G; 8 T; 0 U; 0 Other;  
 Query Match 3.1%; Score 13.8; DB 1; Length 17;  
 Best Local Similarity 88.2%; Pred. No. 3.4e+02;  
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 368 AGGAAGAGGACGGGAGC 384  
 Db 17 AGGAAGAGGACGGGATC 1  
 RESULT 338  
 ADL47097  
 ID ADL47097 standard; RNA; 17 BP.  
 XX  
 XX ADL47097;  
 AC  
 XX 20-MAY-2004 (first entry)  
 DT  
 XX Human NOGO receptor zinzyme substrate sequence #84.  
 DE  
 XX antisense oligonucleotide; neurite growth inhibitor; NOGO;  
 KW prostaglandin D2 receptor; PTGDR; IkappaB kinase; IKK;  
 KW protein kinase PKR; cerebrovascular accident;  
 KW central nervous system injury; CNS injury; spinal cord injury; cancer;  
 KW melanoma; lymphoma; glioma; inflammatory disease; rheumatoid arthritis;  
 KW restenosis; asthma; Crohn's disease; diabetes; obesity;  
 KW autoimmune disease; lupus; multiple sclerosis; transplant rejection;  
 KW graft rejection; ischaemia; reperfusion; glomerulonephritis; sepsis;

KW allergy; asthma; allergic rhinitis; atopic dermatitis;  
KW NOGO receptor zinyzyme; substrate; ds.

OS Unidentified.

PN WO200281628-A2.

PD 17-OCT-2002.

XX 03-APR-2002; 2002WO-US010512.

XX 05-APR-2001; 2001US-00827395.

XX 29-MAY-2001; 2001US-0294412P.

XX 28-AUG-2001; 2001US-0315315P.

XX (RIBO-) RIBOZYME PHARM INC.

XX Blatt L, Chowrira B, Haerberli P, Mcswiggen J, Fosnaugh K;

XX WPI; 2003-058513/05.

XX Novel enzymatic nucleic acid that down-regulates expression of neurite

PT growth inhibitor receptor, prostaglandin D2 receptor, IkappaB kinase or

PT protein kinase PKR genes, for treating cancer and inflammatory disease.

XX Claim 9; SEQ ID NO 630; 317pp; English.

XX The invention comprises nucleic acids (e.g. antisense oligonucleotides)

CC that down regulate the expression or inhibit the function of a receptor

CC for a neurite growth inhibitor, NOGO, prostaglandin D2 receptor (PTGDR),

CC IkappaB kinase (IKK), or protein kinase PKR. The nucleic acids of the

CC invention are useful for treating: cerebrovascular accident, central

CC nervous system (CNS) injury, spinal cord injury, cancer (e.g. melanoma,

CC lymphoma or glioma), inflammatory disease (e.g. rheumatoid arthritis,

CC restenosis or asthma), Crohn's disease, diabetes, obesity, autoimmune

CC disease, lupus, multiple sclerosis, transplant/graft rejection,

CC ischaemia/reperfusion injury, glomerulonephritis, sepsis, and allergic

CC conditions (e.g. asthma, allergic rhinitis or atopic dermatitis). The

CC nucleic acids of the invention are also useful for down-regulating the

CC expression of a target gene and as a diagnostic tool to examine genetic

CC drifts and mutations within diseased cells or to detect the presence of a

CC target RNA in a cell. The present RNA sequence represents a human NOGO

CC receptor zinyzyme substrate sequence.

XX Sequence 17 BP; 0 A; 6 C; 8 G; 0 T; 3 U; 0 Other;

Query Match 3.1%; Score 13.8; DB 1; Length 17;

Best Local Similarity 76.5%; Pred. No. 3.4e+02;

Matches 13; Conservative 2; Mismatches 2; Indels 0; Gaps 0;

Oy 263 GGCCCGGGGGCTTCTCCG 279

Db 1 GGCCCGGGGGCUGUCCG 17

RESULT 339

KW

KW

XX

OS

XX

PN

XX

PD

XX

XX

XX

XX

XX

XX

XX

XX

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XX

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XX

XX

XX

XX

XX

allergy; asthma; allergic rhinitis; atopic dermatitis; human PTGDR;

substrate; ds.

Unidentified.

WO200281628-A2.

17-OCT-2002.

03-APR-2002; 2002WO-US010512.

05-APR-2001; 2001US-00827395.

29-MAY-2001; 2001US-0294412P.

28-AUG-2001; 2001US-0315315P.

(RIBO-) RIBOZYME PHARM INC.

Blatt L, Chowrira B, Haerberli P, Mcswiggen J, Fosnaugh K;

WPI; 2003-058513/05.

Novel enzymatic nucleic acid that down-regulates expression of neurite

growth inhibitor receptor, prostaglandin D2 receptor, IkappaB kinase or

protein kinase PKR genes, for treating cancer and inflammatory disease.

Claim 161; SEQ ID NO 5454; 317pp; English.

The invention comprises nucleic acids (e.g. antisense oligonucleotides)

that down regulate the expression or inhibit the function of a receptor

for a neurite growth inhibitor, NOGO, prostaglandin D2 receptor (PTGDR),

IkappaB kinase (IKK), or protein kinase PKR. The nucleic acids of the

invention are useful for treating: cerebrovascular accident, central

nervous system (CNS) injury, spinal cord injury, cancer (e.g. melanoma,

lymphoma or glioma), inflammatory disease (e.g. rheumatoid arthritis,

restenosis or asthma), Crohn's disease, diabetes, obesity, autoimmune

disease, lupus, multiple sclerosis, transplant/graft rejection,

ischaemia/reperfusion injury, glomerulonephritis, sepsis, and allergic

conditions (e.g. asthma, allergic rhinitis or atopic dermatitis). The

nucleic acids of the invention are also useful for down-regulating the

expression of a target gene and as a diagnostic tool to examine genetic

drifts and mutations within diseased cells or to detect the presence of a

target RNA in a cell. The present RNA sequence represents a human PKR

substrate sequence.

Sequence 17 BP; 9 A; 2 C; 5 G; 0 T; 1 U; 0 Other;

Query Match 3.1%; Score 13.8; DB 1; Length 17;

Best Local Similarity 88.2%; Pred. No. 3.4e+02;

Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Oy 96 CTGTTTTTCTCGTGAC 112

Db 17 CTGTTTTTCTCGTGAC 1

RESULT 340

ADL48304

ADL48304 standard; RNA; 17 BP.

ADL48304;

20-MAY-2004 (first entry)

Human IKK-gamma substrate sequence #814.

antisense oligonucleotide; neurite growth inhibitor; NOGO;

prostaglandin D2 receptor; PTGDR; IkappaB kinase; IKK;

protein kinase PKR; cerebrovascular accident;

central nervous system injury; CNS injury; spinal cord injury; cancer;

melanoma; lymphoma; glioma; inflammatory disease; rheumatoid arthritis;

restenosis; asthma; Crohn's disease; diabetes; obesity;

autoimmune disease; lupus; multiple sclerosis; transplant rejection;

graft rejection; ischaemia; reperfusion; glomerulonephritis; sepsis;

KW allergy; asthma; allergic rhinitis; atopic dermatitis; Human IKK-gamma;  
 KW substrate; ds.  
 XX  
 OS Unidentified.  
 XX  
 PN WO200281628-A2.  
 XX  
 PD 17-OCT-2002.  
 XX  
 XX 03-APR-2002; 2002WO-US010512.  
 XX  
 PF 05-APR-2001; 2001US-00827395.  
 XX  
 PR 29-MAY-2001; 2001US-0294412P.  
 XX  
 PR 28-AUG-2001; 2001US-0315315P.  
 XX  
 XX (RIBO-) RIBOZYME PHARM INC.  
 PA  
 XX Blatt L, Chowrira B, Haerberli P, Mcswiggen J, Fosnaugh K;  
 PI WPI; 2003-058513/05.  
 XX  
 DR Novel enzymatic nucleic acid that down-regulates expression of neurite  
 XX growth inhibitor receptor, prostaglandin D2 receptor, IkappaB kinase or  
 PT protein kinase PKR genes, for treating cancer and inflammatory disease.  
 PT  
 XX Claim 59; SEQ ID NO 1837; 317pp; English.  
 PS  
 XX The invention comprises nucleic acids (e.g. antisense oligonucleotides)  
 CC that down regulate the expression or inhibit the function of a receptor  
 CC for a neurite growth inhibitor, NOGO, prostaglandin D2 receptor (PTGDR),  
 CC IkappaB kinase (IKK), or protein kinase PKR. The nucleic acids of the  
 CC invention are useful for treating: cerebrovascular accident, central  
 CC nervous system (CNS) injury, spinal cord injury, cancer (e.g. melanoma,  
 CC lymphoma or glioma), inflammatory disease (e.g. rheumatoid arthritis,  
 CC restenosis or asthma), Crohn's disease, diabetes, obesity, autoimmune  
 CC disease, lupus, multiple sclerosis, transplant/graft rejection,  
 CC ischaemia/reperfusion injury, glomerulonephritis, sepsis, and allergic  
 CC conditions (e.g. asthma, allergic rhinitis or atopic dermatitis). The  
 CC nucleic acids of the invention are also useful for down-regulating the  
 CC expression of a target gene and as a diagnostic tool to examine genetic  
 CC drifts and mutations within diseased cells or to detect the presence of a  
 CC target RNA in a cell. The present RNA sequence represents a human IKK-  
 CC gamma substrate sequence.  
 XX  
 SQ Sequence 17 BP; 1 A; 7 C; 7 G; 0 T; 2 U; 0 Other;  
 Query Match 3.1%; Score 13.8; DB 1; Length 17;  
 Best Local Similarity 76.5%; Pred. No. 3.4e+02;  
 Matches 13; Conservative 2; Mismatches 2; Indels 0; Gaps 0;  
 QY 249 TGGAGCGCGCGTCCGC 265  
 Db :|||||||:|  
 1 UGGAGCGCGCGCUCGC 17  
 RESULT 341  
 ADL48303  
 ID ADL48303 standard; RNA; 17 BP.  
 XX  
 AC ADL48303;  
 XX  
 DT 20-MAY-2004 (first entry)  
 XX  
 XX Human IKK-gamma substrate sequence #813.  
 DE  
 XX antisense oligonucleotide; neurite growth inhibitor; NOGO;  
 KW prostaglandin D2 receptor; PTGDR; IkappaB kinase; IKK;  
 KW protein kinase PKR; cerebrovascular accident;  
 KW central nervous system injury; CNS injury; spinal cord injury; cancer;  
 KW melanoma; lymphoma; glioma; inflammatory disease; rheumatoid arthritis;  
 KW restenosis; asthma; Crohn's disease; diabetes; obesity;  
 KW autoimmune disease; lupus; multiple sclerosis; transplant rejection;  
 KW graft rejection; ischaemia; reperfusion; glomerulonephritis; sepsis;

KW allergy; asthma; allergic rhinitis; atopic dermatitis; Human IKK-gamma;  
 KW substrate; ds.  
 XX  
 OS Unidentified.  
 XX  
 PN WO200281628-A2.  
 XX  
 PD 17-OCT-2002.  
 XX  
 XX 03-APR-2002; 2002WO-US010512.  
 XX  
 PF 05-APR-2001; 2001US-00827395.  
 XX  
 PR 29-MAY-2001; 2001US-0294412P.  
 XX  
 PR 28-AUG-2001; 2001US-0315315P.  
 XX  
 XX (RIBO-) RIBOZYME PHARM INC.  
 PA  
 XX Blatt L, Chowrira B, Haerberli P, Mcswiggen J, Fosnaugh K;  
 PI WPI; 2003-058513/05.  
 XX  
 DR Novel enzymatic nucleic acid that down-regulates expression of neurite  
 XX growth inhibitor receptor, prostaglandin D2 receptor, IkappaB kinase or  
 PT protein kinase PKR genes, for treating cancer and inflammatory disease.  
 PT  
 XX Claim 59; SEQ ID NO 1836; 317pp; English.  
 PS  
 XX The invention comprises nucleic acids (e.g. antisense oligonucleotides)  
 CC that down regulate the expression or inhibit the function of a receptor  
 CC for a neurite growth inhibitor, NOGO, prostaglandin D2 receptor (PTGDR),  
 CC IkappaB kinase (IKK), or protein kinase PKR. The nucleic acids of the  
 CC invention are useful for treating: cerebrovascular accident, central  
 CC nervous system (CNS) injury, spinal cord injury, cancer (e.g. melanoma,  
 CC lymphoma or glioma), inflammatory disease (e.g. rheumatoid arthritis,  
 CC restenosis or asthma), Crohn's disease, diabetes, obesity, autoimmune  
 CC disease, lupus, multiple sclerosis, transplant/graft rejection,  
 CC ischaemia/reperfusion injury, glomerulonephritis, sepsis, and allergic  
 CC conditions (e.g. asthma, allergic rhinitis or atopic dermatitis). The  
 CC nucleic acids of the invention are also useful for down-regulating the  
 CC expression of a target gene and as a diagnostic tool to examine genetic  
 CC drifts and mutations within diseased cells or to detect the presence of a  
 CC target RNA in a cell. The present RNA sequence represents a human IKK-  
 CC gamma substrate sequence.  
 XX  
 SQ Sequence 17 BP; 1 A; 6 C; 8 G; 0 T; 2 U; 0 Other;  
 Query Match 3.1%; Score 13.8; DB 1; Length 17;  
 Best Local Similarity 76.5%; Pred. No. 3.4e+02;  
 Matches 13; Conservative 2; Mismatches 2; Indels 0; Gaps 0;  
 QY 246 GCCTGGAGCGCGGTC 262  
 Db :|||||||:|  
 1 GCGUGAGCGCGCGCUC 17  
 RESULT 342  
 ADM53854/c  
 ID ADM53854 standard; mRNA; 17 BP.  
 XX  
 AC ADM53854;  
 XX  
 DT 03-JUN-2004 (first entry)  
 XX  
 XX Human GRID mRNA substrate sequence #129.  
 DE  
 XX Human; ss; GRID; Grb2-related with insert domain; hammerhead ribozyme;  
 KW NCH ribozyme; G-cleaver ribozyme; Zinzyme; DNazyme; amberyzyme; Inozyme;  
 KW hairpin ribozyme; tissue rejection; graft rejection; leukaemia.  
 XX  
 OS Homo sapiens.  
 XX  
 PN US2003134806-A1.  
 XX

```
PD 17-JUL-2003.
XX
XX 23-FEB-2001; 2001US-00792818.
XX
XX 10-FEB-2000; 2000US-0181594P.
XX
XX (JARV/) JARVIS T.
PA (CARL/) CARLOWITZ I V.
PA (MCSW/) MCSWIGGEN J.
PA (HAMB/) HAMBLIN P A.
PA (ELLI/) ELLIS J H.
XX
XX Jarvis T, Carlowitz IV, Mcswiggen J, Hamblin PA, Ellis JH;
PI WPI; 2003-829646/77.
XX
XX New nucleic acid molecule that down-regulates expression of Grb2-related
XX with insert domain (GRID) gene, useful for treating a condition
XX associated with the level of GRID, e.g. tissue/graft rejection and
XX leukemia.
XX
XX Claim 4; SEQ ID NO 129; 74pp; English.
XX
XX The invention relates to a nucleic acid molecule that down-regulates
XX expression of Grb2-related with insert domain (GRID) gene, e.g. a
XX hammerhead ribozyme, NCH ribozyme, G-cleaver ribozyme, Zinzyme, DNazyme,
XX amberzyme, Inozyme or hairpin ribozyme. Also include are a mammalian cell
XX including the novel nucleic acid molecule, reducing GRID activity in a
XX cell by contacting the cell with the novel nucleic acid molecule,
XX treating a patient having a condition associated with the level of GRID
XX (e.g. tissue/graft rejection or leukaemia) by contacting the cell with
XX the novel nucleic acid molecule, cleaving RNA of a GRID gene by
XX contacting the cell with the novel nucleic acid molecule, an expression
XX vector comprising a nucleic acid sequences (encoding at least the novel
XX nucleic acid molecule, cleaving RNA of a GRID gene by
XX contacting the cell with the novel nucleic acid molecule, an expression
XX vector comprising a nucleic acid sequences (encoding at least the novel
XX nucleic acid molecule in a manner that allows its expression), a
XX mammalian cell including the expression vector and an enzymatic nucleic
XX acid molecule that cleaves RNA derived from a GRID gene. The nucleic acid
XX molecule is useful for treating a condition associated with the level of
XX GRID, e.g. tissue/graft rejection and leukaemia. The present sequence is
XX a target region for the enzymatic nucleic acids of the invention.
XX
XX Sequence 17 BP; 3 A; 5 C; 8 G; 0 T; 1 U; 0 Other;
SQ
Query Match 3.1%; Score 13.8; DB 1; Length 17;
Best Local Similarity 88.2%; Pred. No. 3.4e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 201 CTCCTGGGACCTCGG 217
Db 17 CTCCTGGGACCTCGG 1
RESULT 343
ADM54055/c
ID ADM54055 standard; mRNA; 17 BP.
XX
XX ADM54055;
AC
XX 03-JUN-2004 (first entry)
DT
XX Human GRID mRNA substrate sequence #330.
DE
XX Human; ss; GRID; Grb2-related with insert domain; hammerhead ribozyme;
XX NCH ribozyme; G-cleaver ribozyme; Zinzyme; DNazyme; Inozyme;
XX hairpin ribozyme; tissue rejection; graft rejection; leukaemia.
XX
XX Homo sapiens.
OS
XX US2003134806-A1.
PN
XX 17-JUL-2003.
PD
XX 23-FEB-2001; 2001US-00792818.
XX
XX 10-FEB-2000; 2000US-0181594P.
XX
XX (JARV/) JARVIS T.
PA (CARL/) CARLOWITZ I V.
PA (MCSW/) MCSWIGGEN J.
PA (HAMB/) HAMBLIN P A.
PA (ELLI/) ELLIS J H.
XX
XX Jarvis T, Carlowitz IV, Mcswiggen J, Hamblin PA, Ellis JH;
PI WPI; 2003-829646/77.
XX
XX New nucleic acid molecule that down-regulates expression of Grb2-related
XX with insert domain (GRID) gene, useful for treating a condition
XX associated with the level of GRID, e.g. tissue/graft rejection and
XX leukemia.
XX
XX Claim 4; SEQ ID NO 129; 74pp; English.
XX
XX The invention relates to a nucleic acid molecule that down-regulates
XX expression of Grb2-related with insert domain (GRID) gene, e.g. a
XX hammerhead ribozyme, NCH ribozyme, G-cleaver ribozyme, Zinzyme, DNazyme,
XX amberzyme, Inozyme or hairpin ribozyme. Also include are a mammalian cell
XX including the novel nucleic acid molecule, reducing GRID activity in a
XX cell by contacting the cell with the novel nucleic acid molecule,
XX treating a patient having a condition associated with the level of GRID
XX (e.g. tissue/graft rejection or leukaemia) by contacting the cell with
XX the novel nucleic acid molecule, cleaving RNA of a GRID gene by
XX contacting the cell with the novel nucleic acid molecule, an expression
XX vector comprising a nucleic acid sequences (encoding at least the novel
XX nucleic acid molecule in a manner that allows its expression), a
XX mammalian cell including the expression vector and an enzymatic nucleic
XX acid molecule that cleaves RNA derived from a GRID gene. The nucleic acid
XX molecule is useful for treating a condition associated with the level of
XX GRID, e.g. tissue/graft rejection and leukaemia. The present sequence is
XX a target region for the enzymatic nucleic acids of the invention.
XX
XX Sequence 17 BP; 3 A; 5 C; 8 G; 0 T; 1 U; 0 Other;
SQ
Query Match 3.1%; Score 13.8; DB 1; Length 17;
Best Local Similarity 88.2%; Pred. No. 3.4e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 201 CTCCTGGGACCTCGG 217
Db 17 CTCCTGGGACCTCGG 1
RESULT 344
ADI85884/c
ID ADI85884 standard; RNA; 17 BP.
XX
XX ADI85884;
AC
XX 03-JUN-2004 (first entry)
DT
XX HCV DNazyme substrate sequence #3130.
DE
XX ss; enzymatic nucleic acid; RNA cleavage; hepatitis C virus; HCV;
XX HCV infection; type I interferon; DNazyme.
XX
XX Hepatitis C virus.
OS
XX US2003125270-A1.
PN
XX 03-JUL-2003.
PD
XX 18-DEC-2000; 2000US-00740332.
XX
XX 18-DEC-2000; 2000US-00740332.
XX
XX (BLATT/) BLATT L.
PA
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PA (MCSW/) MCSWIGGEN J.  
PA (ROBE/) ROBERTS E.  
PA (PAVC/) PAVCO P A.  
PA (MACE/) MACEJACK D.  
XX  
PI Blatt L, Mcswiggen J, Roberts E, Pavco PA, Macejack D;  
XX  
XX WPI; 2004-031273/03.  
XX  
XX  
PT Enzymatic nucleic acid molecules which specifically cleave RNA derived  
PT from hepatitis C virus (HCV), useful for the treatment of HCV infections,  
PT especially in combination with type I interferon therapy.  
XX  
XX  
XX Claim 1; SEQ ID NO 3130; 198pp; English.  
XX  
XX The invention relates to an enzymatic nucleic acid molecule which  
CC specifically cleaves RNA derived from hepatitis C virus (HCV), in which  
CC the binding arms of the enzymatic nucleic acid molecule comprises  
CC sequences complementary to any of the defined substrate sequences given  
CC in the specification. The nucleic acid molecule may be administered for  
CC the treatment of HCV infections, especially in combination with type I  
CC interferons. The present sequence represents a HCV DNzyme substrate  
CC sequence.  
XX  
XX Sequence 17 BP; 3 A; 11 C; 2 G; 0 T; 1 U; 0 Other;  
SQ  
Query Match 3.1%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 3.4e+02;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 20 TGGAGGGGTGGTGGCC 36  
||||||| |||||  
Db 17 TGGAGGGGTGGTGGCC 1  
  
RESULT 345  
AA62696  
ID AAX62696 standard; RNA; 18 BP.  
XX  
AC AAX62696;  
XX  
XX 16-JUL-1999 (first entry)  
DT  
DE Granule bound starch synthase hairpin substrate SEQ ID NO:571.  
XX  
XX Maize; corn; Zea mays; delta-9 desaturase; GBSS; target; substrate;  
XX granule bound starch synthase; hammerhead ribozyme; hairpin ribozyme;  
XX modulation; gene expression; transgenic plant; cleavage; canola plant;  
XX caffeine synthesis; coffee plant; nicotine production; tobacco;  
XX fruit ripening; flower pigmentation; lignin production; ss.  
XX  
OS Zea mays.  
XX  
XX WO9710328-A2.  
DN  
XX 20-MAR-1997.  
PD  
XX 12-JUL-1996; 96WO-US011689.  
PF  
XX 13-JUL-1995; 95US-0001135P.  
PR  
XX (RIBO-) RIBOZYME PHARM INC.  
PA (DOWC) DOWELANCO.  
XX  
XX Zwick MG, Edington BE, Mcswiggen JA, Merlo PAO, Guo L, Skokut TA;  
XX Young SA, Folkerts O, Merlo DJ;  
XX WPI; 1997-202224/18.  
DR  
XX Ribozyme which modulates plant gene expression - preferably modulates  
XX expression of DELTA-9 desaturase or granule bound starch synthase in  
XX maize or canola.

PS Claim 42; Page 83; 155pp; English.  
XX  
XX The present invention describes an enzymatic nucleic acid molecule (1)  
CC with RNA cleaving activity, which modulates the expression of a plant  
CC gene. Also described is a gene comprising a cDNA sequence encoding maize  
CC Delta-9 desaturase. (1) can be used to modulate expression of a gene,  
CC preferably Delta-9 desaturase or a granule bound starch synthase (GBSS)  
CC gene, in a plant (preferably a maize or canola plant). (1) can be used to  
CC modulate caffeine synthesis in a coffee plant, nicotine production in a  
CC tobacco plant, fruit ripening processes in an apple, tomato, pear, plum  
CC or peach plant, flower pigmentation in a rose, petunia, chrysanthemum or  
CC marigold plant or lignin production in a tobacco, aspen, poplar or pine  
CC plant  
XX  
XX Sequence 18 BP; 1 A; 9 C; 7 G; 0 T; 1 U; 0 Other;  
SQ  
Query Match 3.1%; Score 13.8; DB 1; Length 18;  
Best Local Similarity 82.4%; Pred. No. 3.6e+02;  
Matches 14; Conservative 1; Mismatches 2; Indels 0; Gaps 0;  
QY 134 CGGCCTGCCGCTTCCA 150  
||||:||||| |||  
Db 2 CGGCCUGCGCGGCCA 18  
  
RESULT 346  
AAV35627/C  
ID AAV35627 standard; DNA; 18 BP.  
XX  
AC AAV35627;  
XX  
XX 07-SEP-1998 (first entry)  
DT  
DE SHOX gene exon II (ET93) specific antisense primer ASP3.  
XX  
XX Homeobox domain; human growth gene; growth regulation; growth defect;  
XX turner's syndrome; short stature homeobox containing gene; short stature;  
XX SHOX; bone disease; osteoporosis; calcium regulation; PCR primer; ss.  
XX  
OS Synthetic.  
XX  
XX Homo sapiens.  
XX  
XX WO9814568-A1.  
DN  
XX 09-APR-1998.  
PD  
XX 29-SEP-1997; 97WO-EP005355.  
PF  
XX 01-OCT-1996; 96US-0027633P.  
PR  
XX 16-JAN-1997; 97EP-00100583.  
XX  
XX (RAPP/) RAPPOLD-HOERBRAND G.  
PA  
XX  
XX Rappold-Hoerbrand G, Rao E;  
PI  
XX WPI; 1998-271719/24.  
DR  
XX  
XX New human growth genes - used to develop products for the diagnosis and  
XX treatment of human growth defects such as short stature, e.g. Turner's  
XX syndrome.  
XX  
XX Disclosure; Page 11; 84pp; English.  
XX  
XX This exon specific primer used in the PCR amplification of a short  
CC stature associated sequence. The gene region corresponding to short  
CC stature has been identified as a region of approximately 500 kb in the  
CC PAR1 region of the X and Y chromosomes. Three genes in this region have  
CC been identified as candidates for the short stature gene. These genes  
CC were designated SHOX (also referred to as SHOX93 or HOX93), pT92 and  
CC SHOT (SHOX-like homeobox gene on chromosome three). The SHOX gene has two  
CC separate splicing sites resulting in two variations SHOXa and SHOXb. The  
CC specification provides sequences of SHOX (short stature homeobox-  
CC containing) genes SHOX ET92, SHOXa, SHOXb, SHOT and exons of the SHOX



CC genes as shown in AAV35610 to AAV35621 and protein sequences of the human  
CC growth protein transcription factor SHOXa, SHOXb and SHOXc as shown  
CC AAW60573 to AAW60575. The novel genes are responsible for human growth.  
CC Defects in the genes can cause short stature, e.g. Turner's syndrome. The  
CC products can be used to develop agents for the treatment of short stature  
CC or other human growth disorders. The products can also be used for  
CC providing a mitogenic effect on cells, e.g. for the treatment of bone  
CC diseases such as osteoporosis and diseases involved with disturbance in  
CC the bone calcium regulation  
XX  
SQ Sequence 18 BP; 0 A; 14 C; 4 G; 0 T; 0 U; 0 Other;

Query Match 3.1%; Score 13.8; DB 1; Length 18;  
Best Local Similarity 88.2%; Pred. No. 3.6e+02;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 332 CGGGGGCGAGGCGGAGG 348  
Db 17 CGGGGGCGGGCGGGG 1

RESULT 347  
ADL88552/C  
ID ADL88552 standard; DNA; 18 BP.  
XX  
AC ADL88552;  
XX  
XX 20-MAY-2004 (first entry)  
DT  
XX  
DE Probe 52 used to detect polymorphism in human HLA-DRB1 exon 2 DNA.  
DE  
XX  
KW polymorphism; genetic variation; exon 2; HLA-DRB1; human; probe; ss.  
XX  
OS Homo sapiens.  
OS Synthetic.

XX JP2004024247-A.  
FN  
XX 29-JAN-2004.  
PD  
XX 30-APR-2003; 2003JP-00126006.  
PF  
XX 30-APR-2002; 2002JP-00129069.  
PR  
XX (KOKU-) KOKUSAI SHIYAKU KK.  
PA  
XX WPI; 2004-127112/13.

XX Novel probe for detecting gene polymorphism, contains oligonucleotide  
PT which is complementary to target sequence, has artificial mismatch with  
PT respect to target, and has original mismatch with respect to allelic  
PT variant of target.  
XX  
XX Claim 1; SEQ ID NO 52; 74pp; Japanese.  
PS  
XX The invention relates to a novel probe for hybridising to a target  
CC nucleic acid and detecting gene polymorphisms. The probe comprises a base  
CC sequence that is complementary to the target nucleic acid and has at  
CC least one artificial mismatch and at least one original mismatch with  
CC respect to the target nucleic acid, where the artificial mismatch and  
CC original mismatch exist in different base positions. The probe of the  
CC invention may be useful for detecting genetic variation by gene  
CC amplification, mutation-specific DNA sequencing or a mutation-specific  
CC DNA chip, preferably for detecting a polymorphism in exon 2 of HLA-DRB1.  
CC The current sequence is that of a probe of the invention which was used  
CC to detect a polymorphism in human HLA-DRB1 exon 2 DNA.  
XX  
SQ Sequence 18 BP; 2 A; 6 C; 9 G; 1 T; 0 U; 0 Other;

Query Match 3.1%; Score 13.8; DB 1; Length 18;  
Best Local Similarity 88.2%; Pred. No. 3.6e+02;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 332 CGGGGGCGAGGCGGAGG 348  
Db 17 CGGGGGCGGGCGGGG 1

RESULT 349  
ADL88552/C  
ID ADL88552 standard; DNA; 18 BP.  
XX  
AC ADL88552;  
XX  
XX 20-MAY-2004 (first entry)  
DT  
XX  
DE Probe 52 used to detect polymorphism in human HLA-DRB1 exon 2 DNA.  
DE  
XX  
KW polymorphism; genetic variation; exon 2; HLA-DRB1; human; probe; ss.  
XX  
OS Homo sapiens.  
OS Synthetic.

XX JP2004024247-A.  
FN  
XX 29-JAN-2004.  
PD  
XX 30-APR-2003; 2003JP-00126006.  
PF  
XX 30-APR-2002; 2002JP-00129069.  
PR  
XX (KOKU-) KOKUSAI SHIYAKU KK.  
PA  
XX WPI; 2004-127112/13.

XX Novel probe for detecting gene polymorphism, contains oligonucleotide  
PT which is complementary to target sequence, has artificial mismatch with  
PT respect to target, and has original mismatch with respect to allelic  
PT variant of target.  
XX  
XX Claim 1; SEQ ID NO 52; 74pp; Japanese.  
PS  
XX The invention relates to a novel probe for hybridising to a target  
CC nucleic acid and detecting gene polymorphisms. The probe comprises a base  
CC sequence that is complementary to the target nucleic acid and has at  
CC least one artificial mismatch and at least one original mismatch with  
CC respect to the target nucleic acid, where the artificial mismatch and  
CC original mismatch exist in different base positions. The probe of the  
CC invention may be useful for detecting genetic variation by gene  
CC amplification, mutation-specific DNA sequencing or a mutation-specific  
CC DNA chip, preferably for detecting a polymorphism in exon 2 of HLA-DRB1.  
CC The current sequence is that of a probe of the invention which was used  
CC to detect a polymorphism in human HLA-DRB1 exon 2 DNA.  
XX  
SQ Sequence 18 BP; 2 A; 6 C; 9 G; 1 T; 0 U; 0 Other;

Qy 262 CGGGCCGGGGCTTCTCC 278  
Db 18 CGGGCCGGGGCTTCTCC 2

RESULT 348  
ADL88552/C  
ID ADL88552 standard; DNA; 18 BP.  
XX  
AC ADL88552;  
XX  
XX 03-JUN-2004 (first entry)  
DT  
XX  
DE DNA oligo to construct an odourant receptor expression vector SeqID102.  
DE  
XX  
KW ss; chemical sensor system; taste; smell; artificial sensory organ;  
KW olfactory stimulation; food industry; hygiene inspection;  
KW environmental examination; disease diagnosis; carvone.  
XX  
OS Synthetic.

XX WO2003100057-A1.  
FN  
XX 04-DEC-2003.  
PD  
XX 28-MAY-2003; 2003WO-JP006719.  
PF  
XX 28-MAY-2002; 2002JP-00154239.  
PR  
XX 13-JUN-2002; 2002JP-00172412.  
PR  
XX 14-JAN-2003; 2003JP-00005175.  
PR  
XX (NAAD-) NAT INST ADVANCED IND SCI & TECHNOLOGY.  
PA  
XX Sato T, Hirono J, Hamana H, Miyake M, Yoshikawa T, Miyake J;  
PI  
XX WPI; 2004-023356/02.

XX Chemical sensor systems based on chemical receptors introduced into cells  
PT for immobilization onto support to form chip as component of sensor,  
PT useful in detecting stimuli e.g. taste and smell applicable in food  
PT industry.  
XX  
XX Example 9; SEQ ID NO 102; 521pp; Japanese.

XX This invention relates to a novel chemical sensor system method.  
CC Specifically, it refers to an isolated nucleic acid molecule that encodes  
CC a receptor protein, which binds to chemicals that can stimulate the sense  
CC of taste or smell for example. The present invention describes the  
CC manufacture of a chip that acts as a support to immobilise transfected  
CC cells expressing the receptor gene, such that this chip can be employed  
CC as a component of the chemical sensor model. Furthermore, this chip is  
CC useable as an artificial sensory organ where the chemical receptor  
CC contains an olfactory receptor the sensor can react to olfactory  
CC stimulation. Accordingly, these sensors are useful in the food industry  
CC for analysing freshness of meat, fruit and vegetables, hygiene  
CC inspection, environmental examination and disease diagnosis. Furthermore,  
CC such systems are automatable for high throughput applications under  
CC various conditions, even for differentiating optical isomers of R(-)-  
CC carvone from S(+)-carvone easily. This oligonucleotide sequence is used  
CC to construct an odourant receptor DNA expression vector of the invention.  
XX  
SQ Sequence 18 BP; 5 A; 8 C; 4 G; 1 T; 0 U; 0 Other;

Query Match 3.1%; Score 13.8; DB 1; Length 18;  
Best Local Similarity 88.2%; Pred. No. 3.6e+02;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 237 CCGAACCCCGCCTGGAG 253  
Db 2 CCGAACCCCGCCTGGAG 18

RESULT 349



PR 24-FEB-2000; 2000US-0184594P.  
XX (RIBO-) RIBOZYME PHARM INC.  
PA (GLAX ) GLAXO GROUP LTD.  
XX  
PI Jarvis T, Von Carlowitz I, Mcswiggen JA, Hamblin PA, Ellis JH;  
XX WPI; 2001-550088/61.  
DR  
XX  
XX New nucleic acid(s) for regulating the Grb2-related with Insert Domain  
PT (GRID) gene comprises using antisense and enzymatic nucleic acid  
PT molecules such as hammerhead ribozymes.  
XX  
XX Claim 4; Page 67; 108pp; English.  
XX  
XX The present invention relates to oligonucleotides that downregulate the  
CC expression of human Grb2-related with Insert Domain (GRID) gene. GRID is  
CC a T-cell co-stimulatory adaptor protein. The oligonucleotides are useful  
CC for modulating the expression of GRID, to treat conditions such as  
CC tissue/graft rejection and leukaemia. The oligonucleotides can also be  
CC administered in conjunction with other therapies such as radiation,  
CC chemotherapy and cyclosporin treatment. The present oligonucleotide was  
CC used to illustrate the invention  
XX  
SQ Sequence 17 BP; 3 A; 4 C; 9 G; 0 T; 1 U; 0 Other;  
Query Match 3.0%; Score 13.4; DB 1; Length 17;  
Best Local Similarity 93.3%; Pred. No. 3.6e+02;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
Qy 132 CTCGCCCTGCCGCT 146  
Db 16 CTCGCCCTGCCGCT 2  
RESULT 352  
ABK18834/C  
ID ABK18834 standard; RNA; 17 BP.  
XX  
XX AC ABK18834;  
XX  
XX 09-APR-2002 (first entry)  
XX Human ERG DNazyme target sequence Seq ID No 1481.  
DE  
XX Human; hammerhead ribozyme; cytostatic; antitumour; antidiabetic;  
KW ophthalmological; antiarthritic; antipsoriatic; virucide; osteopathic;  
KW vulnery; cancer; lymphoma; Ewing's sarcoma; melanoma; psoriasis;  
KW tumour angiogenesis; diabetic retinopathy; macular degeneration;  
KW neovascular glaucoma; myopic degeneration; arthritis; verruca vulgaris;  
KW angiofibroma of tuberous sclerosis; port-wine stain; wound healing;  
KW Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; leukaemia; ss;  
KW Osler-Weber-rendu syndrome, leukaemia; osteoporosis; DNazyme; inozyme;  
KW amberyme.  
XX  
XX Homo sapiens.  
OS  
XX WO200188124-A2.  
XX  
XX 22-NOV-2001.  
XX  
XX 16-MAY-2001; 2001WO-US015866.  
XX  
XX 16-MAY-2000; 2000US-00572021.  
XX  
XX (RIBO-) RIBOZYME PHARM INC.  
PA (GLAX ) GLAXO GROUP LTD.  
XX  
XX Jarvis T, Von Carlowitz I, Mcswiggen JA, McLaughlin F, Randi AM;  
XX WPI; 2002-082995/11.  
XX  
XX Novel polynucleotide which down regulates expression of Ets-related gene,  
PT

PT useful for treating cancer, diabetic retinopathy, macular degeneration,  
XX arthritis, psoriasis, verruca vulgaris and Sturge Weber syndrome.  
XX  
XX Claim 4; Page 93; 149pp; English.  
XX  
XX The invention relates to a nucleic acid molecule (I) which down regulates  
CC expression of an Ets-related gene (ERG). (I) is useful for treating  
CC conditions selected from cancer, lymphoma, Ewing's sarcoma, melanoma,  
CC tumour angiogenesis, diabetic retinopathy, macular degeneration,  
CC neovascular glaucoma, myopic degeneration, arthritis, psoriasis, verruca  
CC vulgaris, angiofibroma of tuberous sclerosis, port-wine stains, Sturge  
CC Weber syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-rendu  
CC syndrome, leukaemia, osteoporosis and wound healing. (I) is useful for  
CC treating a patient having a condition associated with the level of ERG,  
CC by contacting cells of the patient with (I) under conditions suitable for  
CC the treatment. The method comprises the use of one or more therapies  
CC under conditions suitable for the treatment. Leukaemia or tumour  
CC angiogenesis is treated by administering (I) to the patient in  
CC conjunction with one or more of other therapies such as radiation or  
CC chemotherapy treatment. (I) is useful for reducing ERG activity in a  
CC cell, by contacting the cell with (I). (I) is useful for cleaving RNA of  
CC ERG gene, by contacting (I) with RNA, in the presence of a divalent  
CC cation such as Mg2+. (I) is useful for diagnosis of conditions and  
CC diseases related to the expression of ERG, and as diagnostic tool to  
CC examine genetic drift and mutations within diseased cells or to detect  
CC the presence of ERG RNA in a cell. (I) is useful for specifically  
CC targeting genes that share homology with ERG gene or ERG fusion genes.  
CC ABK17354-ABK22719 represent nucleic acids, including antisense and  
CC enzymatic nucleic acid molecules which regulate expression of ERG, and  
CC related PCR primers of the invention  
XX  
XX Sequence 17 BP; 1 A; 5 C; 6 G; 0 T; 5 U; 0 Other;  
Query Match 3.0%; Score 13.4; DB 1; Length 17;  
Best Local Similarity 93.3%; Pred. No. 3.6e+02;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
Qy 124 GGAAGAGCCTCGGCC 138  
Db 16 GGAAGAGCCTCGGCC 2  
RESULT 353  
AAL44028  
ID AAL44028 standard; DNA; 17 BP.  
XX  
XX AC AAL44028;  
XX  
XX 27-SEP-2002 (first entry)  
XX Human cytochrome P4502A6 (CYP4502A6) promoter - polymorphic region 3.  
DE  
XX Human; ds; single nucleotide polymorphism; SNP; cytochrome; P4502A6;  
KW CYP4502A6; CYP2A6; Chromosome 19; steroid metabolism;  
KW drug detoxification; xenobiotic detoxification; procarcinogen activation;  
KW inflammation; asthma; habitual smoking.  
XX  
XX Homo sapiens.  
OS  
XX  
XX Key Location/Qualifiers  
XX variation replace(10, C)  
XX /\*tag= a  
XX /standard\_name= "Single nucleotide polymorphism"  
XX  
XX WO200194633-A1.  
XX  
XX 13-DEC-2001.  
XX  
XX 01-JUN-2001; 2001WO-US017781.  
XX  
XX 02-JUN-2000; 2000US-00586376.  
XX  
XX (DNAS-) DNA SCI INC.

XX PI Guida M, Hall J;  
XX DR WPI; 2002-566448/60.  
XX PT New isolated polynucleotide, useful to screen individuals for asthma,  
XX PT inflammation and susceptibility to habitual smoking, comprises base  
XX PT variation from that of known human cytochrome P4502A6 sequence.  
XX PS Claim 35; Page 27; 48pp; English.  
XX CC The invention comprises the identification of genetic polymorphisms in  
XX CC the human cytochrome P4502A6 (CYP4502A6 or CYP2A6) gene. The human  
XX CC cytochrome P4502A6 gene is located on chromosome 19 and encodes an enzyme  
XX CC that plays a role in the metabolism of steroids, the detoxification of  
XX CC drugs and xenobiotics, and the activation of procarcinogens. The P4502A6  
XX CC polymorphisms identified in the invention are useful for evaluating an  
XX CC individual's risk of developing asthma or an individual's propensity for  
XX CC cigarette consumption. The P4502A6 DNA sequences of the invention are  
XX CC useful for identifying individuals having a polymorphic genotype and to  
XX CC screen individuals for altered metabolism for cytochrome P4502A6  
XX CC substrates. The P4502A6 DNA sequences of the invention are also useful  
XX CC for identifying individuals who are at risk from inflammation, asthma,  
XX CC habitual smoking and diseases that result from environmental or  
XX CC occupational exposures to dangerous substances. The present DNA sequence  
XX CC represents a polymorphic region of the promoter for the human cytochrome  
XX CC P4502A6 gene  
XX SQ Sequence 17 BP; 4 A; 5 C; 1 G; 7 T; 0 U; 0 Other;  
Query Match 3.0%; Score 13.4; DB 1; Length 17;  
Best Local Similarity 93.3%; Pred. No. 3.6e+02;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
QY 41 TTGTGCTACCCCTAA 55  
Db 3 TTGTGCTTACCCCTAA 17  
RESULT 354  
AAL44029  
ID AAL44029 standard; DNA; 17 BP.  
XX AC AAL44029;  
XX DT 27-SEP-2002 (first entry)  
XX DE Human cytochrome P4502A6 (CYP4502A6) promoter - polymorphic region 4.  
XX KW Human; ds; single nucleotide polymorphism; SNP; cytochrome; P4502A6;  
XX KW CYP4502A6; CYP2A6; chromosome 19; steroid metabolism;  
XX KW drug detoxification; xenobiotic detoxification; procarcinogen activation;  
XX KW inflammation; asthma; habitual smoking.  
XX OS Homo sapiens.  
XX PH Key Location/Qualifiers  
XX FT variation replace(10, T)  
XX FT /\*tag= a  
XX FT /standard\_name= "Single nucleotide polymorphism"  
XX PN WO200194633-A1.  
XX PD 13-DEC-2001.  
XX PF 01-JUN-2001; 2001WO-US017781.  
XX PR 02-JUN-2000; 2000US-00586376.  
XX PA (DNAS-) DNA SCI INC.  
XX FI Guida M, Hall J;  
XX

DR WPI; 2002-566448/60.  
XX PT New isolated polynucleotide, useful to screen individuals for asthma,  
XX PT inflammation and susceptibility to habitual smoking, comprises base  
XX PT variation from that of known human cytochrome P4502A6 sequence.  
XX PS Claim 1; Page 27; 48pp; English.  
XX CC The invention comprises the identification of genetic polymorphisms in  
XX CC the human cytochrome P4502A6 (CYP4502A6 or CYP2A6) gene. The human  
XX CC cytochrome P4502A6 gene is located on chromosome 19 and encodes an enzyme  
XX CC that plays a role in the metabolism of steroids, the detoxification of  
XX CC drugs and xenobiotics, and the activation of procarcinogens. The P4502A6  
XX CC polymorphisms identified in the invention are useful for evaluating an  
XX CC individual's risk of developing asthma or an individual's propensity for  
XX CC cigarette consumption. The P4502A6 DNA sequences of the invention are  
XX CC useful for identifying individuals having a polymorphic genotype and to  
XX CC screen individuals for altered metabolism for cytochrome P4502A6  
XX CC substrates. The P4502A6 DNA sequences of the invention are also useful  
XX CC for identifying individuals who are at risk from inflammation, asthma,  
XX CC habitual smoking and diseases that result from environmental or  
XX CC occupational exposures to dangerous substances. The present DNA sequence  
XX CC represents a polymorphic region of the promoter for the human cytochrome  
XX CC P4502A6 gene  
XX SQ Sequence 17 BP; 4 A; 6 C; 1 G; 6 T; 0 U; 0 Other;  
Query Match 3.0%; Score 13.4; DB 1; Length 17;  
Best Local Similarity 93.3%; Pred. No. 3.6e+02;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
QY 41 TTGTGCTACCCCTAA 55  
Db 3 TTGTGCTTACCCCTAA 17  
RESULT 355  
ACA07669  
ID ACA07669 standard; RNA; 17 BP.  
XX AC ACA07669;  
XX DT 03-JUN-2003 (first entry)  
XX DE NFkB sub-unit modulating zinzyme substrate #68.  
XX KW Enzymatic nucleic acid; nuclear factor kappa B; NFkB; inozyme; zinzyme;  
XX KW G-cleaver; amberzyme; cancer; REL-A activity; breast cancer; human;  
XX KW lung cancer; prostate cancer; colorectal cancer; brain cancer;  
XX KW oesophageal cancer; stomach cancer; bladder cancer; pancreatic cancer;  
XX KW cervical cancer; head and neck cancer; ovarian cancer; melanoma;  
XX KW lymphoma; glioma; multidrug resistant cancer; REL-A-specific inhibitor;  
XX KW chemotherapy; paclitaxel; docetaxel; cisplatin; methotrexate;  
XX KW cyclophosphamide; doxorubin; fluorouracil carboplatin; edatrexate;  
XX KW gemcitabine; radiation therapy; inflammatory disease; asthma; diabetes;  
XX KW rheumatoid arthritis; restenosis; Crohn's disease; obesity; ischaemia;  
XX KW gene therapy; autoimmune disease; lupus; multiple sclerosis; sepsis;  
XX KW transplant/graft rejection; reperfusion injury; glomerulonephritis;  
XX KW allergic airway inflammation; inflammatory bowel disease; infection; ss.  
XX OS Homo sapiens.  
XX PN US2002177569-A1.  
XX PD 28-NOV-2002.  
XX PF 23-MAY-2001; 2001US-00864785.  
XX PR 07-DEC-1992; 92US-00987132.  
XX PR 18-MAY-1994; 94US-00245466.  
XX PR 15-AUG-1994; 94US-00291932.  
XX PR 23-DEC-1996; 96US-00777916.

PA (STIN/) STINCHOMB D T.  
PA (MCSW/) MCSWIGGEN J.  
PA (DRAP/) DRAPER K G.  
XX  
XX  
PI Stinchcomb DT, Mcswiggen J, Draper KG;  
XX  
XX WPI; 2003-340953/32.  
XX  
XX Novel enzymatic nucleic acid molecules which down regulates expression of  
PT a sequence encoding a subunit of nuclear factor kappa B useful for  
PT treating cancer, inflammatory disorders and autoimmune diseases.  
XX  
XX Claim 3; Page 38; 72pp; English.  
XX  
XX The invention describes an enzymatic nucleic acid molecule (I) which down  
CC regulates expression of a sequence encoding a subunit of nuclear factor  
CC kappa B (NFkB), where (I) is an inozyme, zinzyme, G-cleaver or amberzyme  
CC configuration. The enzymatic nucleic acid molecule is adapted to treat  
CC cancer and is useful for down-regulating REL-A activity in a cell, for  
CC treating a patient having a condition associated with the level of REL-A.  
CC (I) is useful for cleaving RNA comprising a sequence of REL-A gene, in  
CC the presence of a divalent cation, especially Mg<sup>2+</sup>. The enzymatic and  
CC antisense nucleic acid molecules are useful for treating breast, lung,  
CC prostate, colorectal, brain, oesophageal, stomach, bladder, pancreatic,  
CC cervical, head and neck, ovarian cancer, melanoma, lymphoma, glioma or  
CC multidrug resistant cancer. The method involves use of other drug  
CC therapies such as monoclonal antibodies, REL-A-specific inhibitors or  
CC chemotherapy including paclitaxel, docetaxel, cisplatin, methotrexate,  
CC cyclophosphamide, doxorubin, fluorouracil carboplatin, edatrexate,  
CC gencitabine or radiation therapy. The enzymatic and antisense nucleic  
CC acid molecules are also useful for treating inflammatory disease such as  
CC rheumatoid arthritis, restenosis, asthma, Crohn's disease, diabetes,  
CC obesity, autoimmune disease, lupus, multiple sclerosis, transplant/graft  
CC rejection, gene therapy applications, ischaemia/reperfusion injury  
CC (central nervous system (CNS) and myocardial), glomerulonephritis,  
CC sepsis, allergic airway inflammation, inflammatory bowel disease or  
CC infection. This sequence represents the substrate of a novel enzymatic  
XX nucleic acid molecule  
XX  
SQ Sequence 17 BP; 0 A; 9 C; 4 G; 0 T; 4 U; 0 Other;  
  
Query Match 3.0%; Score 13.4; DB 1; Length 17;  
Best Local Similarity 73.3%; Pred. No. 3.6e+02;  
Matches 11; Conservative 3; Mismatches 1; Indels 0; Gaps 0;  
  
Oy 132 CTCGCCCTCGCGCT 146  
Db 1 CUCGCCUCGCGCCU 15  
|:|:|:|:|:|:|:  
|:|:|:|:|:|:|:  
  
RESULT 356  
ABZ66556  
ID ABZ66556 standard; RNA; 17 BP.  
XX  
XX ABZ66556;  
AC  
XX  
XX 21-MAR-2003 (first entry)  
DT  
XX  
XX Human HIV DNA zyme substrate #13.  
DE  
XX  
XX Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;  
KW enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytosstatic; anti-HIV;  
KW anti-rheumatic; cancer; AIDS; ss.  
XX  
XX Homo sapiens.  
OS  
XX  
XX WO200297114-A2.  
FN  
XX  
XX 05-DEC-2002.  
PD  
XX  
XX 29-MAY-2002; 2002WO-US016840.  
PF  
XX  
XX Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;  
KW enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytosstatic; anti-HIV;  
KW anti-rheumatic; cancer; AIDS; ss.  
XX  
XX Homo sapiens.  
OS  
XX  
XX WO200297114-A2.  
FN  
XX  
XX 05-DEC-2002.  
PD  
XX  
XX 29-MAY-2002; 2002WO-US016840.  
PF  
XX  
XX 29-MAY-2001; 2001US-0294140P.  
PR

PR 06-JUN-2001; 2001US-0296249P.  
PR 10-SEP-2001; 2001US-0318471P.  
XX  
XX (RIBO-) RIBOZYME PHARM INC.  
PA  
XX  
XX Mcswiggen J;  
PI  
XX  
XX WPI; 2003-140484/13.  
DR  
XX  
XX Novel short interfering RNA and enzymatic nucleic acid useful for  
PT treating cancer, modulates the expression of a nucleic acid encoding  
PT HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.  
XX  
XX Claim 123; Page 157; 185pp; English.  
PS  
XX  
XX The invention relates to a novel short interfering RNA (siRNA) nucleic  
CC acid molecule or an enzymatic nucleic acid molecule, that modulates  
CC expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras,  
CC human immunodeficiency virus (HIV) or a component of HIV. The nucleic  
CC acid molecule of the invention has cytosstatic, anti-HIV, and anti-  
CC rheumatic activity. The nucleic acid molecules are useful for reducing  
CC HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are  
CC also useful for treating breast, ovarian, colorectal, lung, prostate,  
CC bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences  
CC shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524,  
CC ABZ66530 - ABZ66585 represent substrate/target sequences for the human  
CC ribozymes of the invention  
XX  
SQ Sequence 17 BP; 3 A; 5 C; 6 G; 0 T; 3 U; 0 Other;  
  
Query Match 3.0%; Score 13.4; DB 1; Length 17;  
Best Local Similarity 80.0%; Pred. No. 3.6e+02;  
Matches 12; Conservative 2; Mismatches 1; Indels 0; Gaps 0;  
  
Oy 428 ACCCAGGACTCGGCT 442  
Db 2 ACCCAGGACUCGGCU 16  
|:|:|:|:|:|:|:  
|:|:|:|:|:|:|:  
  
RESULT 357  
ABZ66567  
ID ABZ66567 standard; RNA; 17 BP.  
XX  
XX ABZ66567;  
AC  
XX  
XX 21-MAR-2003 (first entry)  
DT  
XX  
XX Human HIV amberzyme substrate #19.  
DE  
XX  
XX Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;  
KW enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytosstatic; anti-HIV;  
KW anti-rheumatic; cancer; AIDS; ss.  
XX  
XX Homo sapiens.  
OS  
XX  
XX WO200297114-A2.  
FN  
XX  
XX 05-DEC-2002.  
PD  
XX  
XX 29-MAY-2002; 2002WO-US016840.  
PF  
XX  
XX 29-MAY-2001; 2001US-0294140P.  
PR 06-JUN-2001; 2001US-0296249P.  
PR 10-SEP-2001; 2001US-0318471P.  
XX  
XX (RIBO-) RIBOZYME PHARM INC.  
PA  
XX  
XX Mcswiggen J;  
PI  
XX  
XX WPI; 2003-140484/13.  
DR  
XX  
XX Novel short interfering RNA and enzymatic nucleic acid useful for  
PT treating cancer, modulates the expression of a nucleic acid encoding

PT HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.  
XX Claim 123; Page 158; 185pp; English.  
XX The invention relates to a novel short interfering RNA (siRNA) nucleic acid molecule or an enzymatic nucleic acid molecule, that modulates expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras, human immunodeficiency virus (HIV) or a component of HIV. The nucleic acid molecule of the invention has cytostatic, anti-HIV, and anti-rheumatic activity. The nucleic acid molecules are useful for reducing HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are also useful for treating breast, ovarian, colorectal, lung, prostate, bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524, ABZ66530 - ABZ66585 represent substrate/target sequences for the human CC ribozymes of the invention  
XX  
SQ Sequence 17 BP; 3 A; 6 C; 6 G; 0 T; 2 U; 0 Other;  
Query Match 3.0%; Score 13.4; DB 1; Length 17;  
Best Local Similarity 80.0%; Pred. No. 3.6e+02;  
Matches 1; Conservative 2; Mismatches 1; Indels 0; Gaps 0;  
QY 428 ACCGAGACTCGGCT 442  
DB 3 ACGCAGGACUCGGCU 17  
RESULT 358  
ACD64058/c  
ID ACD64058 standard; RNA; 17 BP.  
XX  
AC ACD64058;  
XX  
DT 30-SEP-2003 (first entry)  
XX  
DE HCV minus strand DNazyme substrate sequence #1361.  
XX  
KW Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;  
KW RNA stability; RNA expression; RNA synthesis; antisense;  
KW enzymatic nucleic acid; hammerhead ribozyme; DNazyme; inozyme; zinzyme;  
KW amberyne; G-cleaver ribozyme; decoy molecule; aptamer;  
KW HBV reverse transcriptase; Enhancer I region; viral replication;  
KW degenerative; disease state; HBV infection; HCV infection; cirrhosis;  
KW liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;  
KW virucide; antiinflammatory; substrate; ss.  
XX  
OS Hepatitis C virus.  
XX  
PN WO200281494-A1.  
XX  
PD 17-OCT-2002.  
XX  
PF 26-MAR-2002; 2002WO-US009187.  
XX  
PR 26-MAR-2001; 2001US-00817879.  
PR 08-JUN-2001; 2001US-00877478.  
PR 08-JUN-2001; 2001US-0296876P.  
PR 24-OCT-2001; 2001US-0335059P.  
PR 05-DEC-2001; 2001US-0337055P.  
XX  
PA (RIBO-) RIBOZYME PHARM INC.  
PA (BLAT/) BLATT L.  
PA (MACE/) MACEJAK D.  
PA (MCSW/) MCSWIGGEN J.  
PA (MORR/) MORRISSEY D.  
PA (PAVC/) PAVCO P.  
PA (LEEP/) LEE P.  
PA (DRAP/) DRAPER K.  
PA (ROBE/) ROBERTS E.  
XX  
PI Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;  
FI Draper K, Roberts E;

XX WPI; 2003-229207/22.  
XX  
XX Novel compound useful for treating cirrhosis, liver failure,  
PT hepatocellular carcinoma, or condition associated with hepatitis C virus  
PT infection.  
XX  
PS Claim 1; Page 299; 387pp; English.  
XX  
CC The present invention relates to nucleic acid molecules which modulate the synthesis, expression and/or stability of Hepatitis C virus (HCV) or Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense and enzymatic nucleic acids such as hammerhead ribozymes, DNazymes, inozymes, zinzyms, amberyne, and G-cleaver ribozymes. Also disclosed are nucleic acid decoy molecules and aptamers that bind to HBV reverse transcriptase and/or HBV reverse transcriptase primer sequences, as well as oligonucleotides that specifically bind the Enhancer I region of HBV DNA. The nucleic acids may be used to modulate the expression of HBV genes and HBV viral replication. Also disclosed is a method for screening compounds and/or potential therapies directed against HBV, and compounds that modulate the expression and/or replication of HCV. The compounds and methods of the invention are useful for the treatment of degenerative and disease states related to HBV and HCV infection, replication and gene expression such as cirrhosis, liver failure, and hepatocellular carcinoma. The present sequence represents a substrate for one of the HCV CC DNazyme or minus strand DNazyme sequences disclosed in the present CC invention  
XX  
SQ Sequence 17 BP; 2 A; 7 C; 6 G; 0 T; 2 U; 0 Other;  
Query Match 3.0%; Score 13.4; DB 1; Length 17;  
Best Local Similarity 93.3%; Pred. No. 3.6e+02;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
QY 210 ACCTGCGGCGGTCG 224  
DB 17 ACCTGCGGCGGTCG 3  
RESULT 359  
ACD58611  
ID ACD58611 standard; RNA; 17 BP.  
XX  
AC ACD58611;  
XX  
DT 24-SEP-2003 (first entry)  
XX  
DE HCV DNazyme substrate sequence #917.  
XX  
KW Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;  
KW RNA stability; RNA expression; RNA synthesis; antisense;  
KW enzymatic nucleic acid; hammerhead ribozyme; DNazyme; inozyme; zinzyme;  
KW amberyne; G-cleaver ribozyme; decoy molecule; aptamer;  
KW HBV reverse transcriptase; Enhancer I region; viral replication;  
KW degenerative; disease state; HBV infection; HCV infection; cirrhosis;  
KW liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;  
KW virucide; antiinflammatory; substrate; ss.  
XX  
OS Hepatitis C virus.  
XX  
PN WO200281494-A1.  
XX  
PD 17-OCT-2002.  
XX  
PF 26-MAR-2002; 2002WO-US009187.  
XX  
PR 26-MAR-2001; 2001US-00817879.  
PR 08-JUN-2001; 2001US-00877478.  
PR 08-JUN-2001; 2001US-0296876P.  
PR 24-OCT-2001; 2001US-0335059P.  
PR 05-DEC-2001; 2001US-0337055P.  
XX  
PA (RIBO-) RIBOZYME PHARM INC.

PA (BLAT//) BLATT L.  
 PA (MACE//) MACEJAK D.  
 PA (MCSW//) MCSWIGGEN J.  
 PA (MORR//) MORRISSEY D.  
 PA (PAVC//) PAVCO P.  
 PA (LEEP//) LEE P.  
 PA (DRAP//) DRAPER K.  
 PA (ROBE//) ROBERTS E.  
 XX  
 XX Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;  
 PI Draper K, Roberts E;  
 XX  
 XX WPI; 2003-229207/22.  
 DR  
 XX Novel compound useful for treating cirrhosis, liver failure,  
 PT hepatocellular carcinoma, or condition associated with hepatitis C virus  
 PT infection.  
 XX  
 PS Claim 1; Page 250; 387pp; English.  
 XX  
 CC The present invention relates to nucleic acid molecules which modulate  
 CC the synthesis, expression and/or stability of Hepatitis C virus (HCV) or  
 CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense  
 CC and enzymatic nucleic acids such as hammerhead ribozymes, DNazymes,  
 CC inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed  
 CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse  
 CC transcriptase and/or HBV reverse transcriptase primer sequences, as well  
 CC as oligonucleotides that specifically bind the Enhancer I region of HBV  
 CC DNA. The nucleic acids may be used to modulate the expression of HBV  
 CC genes and HBV viral replication. Also disclosed is a method for screening  
 CC compounds and/or potential therapies directed against HBV, and compounds  
 CC that modulate the expression and/or replication of HCV. The compounds and  
 CC methods of the invention are useful for the treatment of degenerative and  
 CC disease states related to HBV and HCV infection, replication and gene  
 CC expression such as cirrhosis, liver failure, and hepatocellular  
 CC carcinoma. The present sequence represents a substrate for one of the HCV  
 CC DNazyme or minus strand DNazyme sequences disclosed in the present  
 CC invention  
 XX  
 SQ Sequence 17 BP; 1 A; 7 C; 7 G; 0 T; 2 U; 0 Other;  
 Query Match 3.0%; Score 13.4; DB 1; Length 17;  
 Best Local Similarity 80.0%; Pred. No. 3.6e+02;  
 Matches 12; Conservative 2; Mismatches 1; Indels 0; Gaps 0;  
 Qy 210 ACCTGCGCGCGGTGC 224  
 Db 2 ACCUGCGCGCGCUCG 16  
 |||:|||||:|  
 RESULT 360  
 ADI48631/c  
 ID ADI48631 standard; DNA; 17 BP.  
 XX  
 AC ADI48631;  
 XX  
 DT 15-APR-2004 (first entry)  
 XX  
 DE Human tumour suppression/reversion-related DNA sequence SeqID1134.  
 XX  
 KW tumour suppression; tumour reversion; apoptosis; virus resistance;  
 KW cytosstatic; virucide; neuroprotective; nootropic; neuroleptic; probe;  
 KW primer; PCR; Gene chip; antisense; viral disease; tumour;  
 KW cell degeneration; cancer; Alzheimer's disease; schizophrenia; ds; human.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2003025177-A2.  
 XX  
 PD 27-MAR-2003.  
 XX  
 PF 17-SEP-2002; 2002WO-IB004523.

PR 17-SEP-2001; 2001FR-00011980.  
 XX (MOLE-) MOLECULAR ENGINES LAB.  
 XX  
 PI Telerman A, Amson R, Tuijnder M;  
 XX  
 XX WPI; 2003-313354/30.  
 XX  
 PT New isolated nucleic acid, useful for treating viral diseases associated  
 PT with tumors and cell degeneration, also related polypeptides, antibodies  
 PT and transfected cells.  
 XX  
 XX Disclosure; SEQ ID NO 1134; 30pp; French.  
 PS  
 XX This invention relates to novel isolated nucleic acid sequences involved  
 CC in the phenomena of tumour suppression, tumour reversion, apoptosis  
 CC and/or resistance to viruses. The invention may be useful for the  
 CC development of compounds with a cytostatic, virucide, neuroprotective,  
 CC nootropic or neuroleptic activity. The DNA sequences may be useful as  
 CC probes and primers for detecting, identifying, quantifying and/or  
 CC amplifying nucleic acid, for example as one component of a gene chip, in  
 CC vitro as antisense reagents and for production of recombinant  
 CC polypeptides. The invention may therefore be useful for preparation of  
 CC pharmaceuticals for prevention and/or treatment of viral diseases that  
 CC are characterised by development of tumours or cell degeneration,  
 CC specifically cancer but also Alzheimer's disease and schizophrenia. The  
 CC present sequence is that of a nucleic acid sequence of the invention.  
 CC Note: The sequence data for this patent did not form part of the printed  
 CC specification, but was obtained in electronic format directly from WIPO  
 CC at ftp.wipo.int/pub/publishedpct\_sequences  
 XX  
 SQ Sequence 17 BP; 8 A; 3 C; 5 G; 1 T; 0 U; 0 Other;  
 Query Match 3.0%; Score 13.4; DB 1; Length 17;  
 Best Local Similarity 93.3%; Pred. No. 3.6e+02;  
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 Qy 97 TGTTCCTCGCTGA 111  
 Db 17 TGTTCCTCGCTGA 3  
 |||||:|||||  
 RESULT 361  
 ADM54545/c  
 ID ADM54545 standard; mRNA; 17 BP.  
 XX  
 AC ADM54545;  
 XX  
 DT 03-JUN-2004 (first entry)  
 XX  
 DE Human GRID mRNA substrate sequence #855.  
 XX  
 KW Human; ss; GRID; Grb2-related with insert domain; hammerhead ribozyme;  
 KW NCH ribozyme; G-cleaver ribozyme; zinzyme; DNazyme; amberzyme; Inozyme;  
 KW hairpin ribozyme; tissue rejection; graft rejection; leukaemia.  
 XX  
 OS Homo sapiens.  
 XX  
 PN US2003134806-A1.  
 XX  
 PD 17-JUL-2003.  
 XX  
 PF 23-FEB-2001; 2001US-00792818.  
 XX  
 PR 10-FEB-2000; 2000US-0181594P.  
 XX  
 PA (JARV//) JARVIS T.  
 PA (CARL//) CARLOWITZ I V.  
 PA (MCSW//) MCSWIGGEN J.  
 PA (HAMB//) HAMBLIN P A.  
 PA (ELLI//) ELLIS J H.  
 XX  
 PI Jarvis T, Carlowitz IV, Mcswiggen J, Hamblin PA, Ellis JH;

XX WPI; 2003-829646/77.  
 XX  
 XX New nucleic acid molecule that down-regulates expression of Grb2-related  
 PT with insert domain (GRID) gene, useful for treating a condition  
 PT associated with the level of GRID, e.g. tissue/graft rejection and  
 PT leukemia.  
 XX  
 XX Claim 4; SEQ ID NO 857; 74pp; English.  
 XX  
 CC The invention relates to a nucleic acid molecule that down-regulates  
 CC expression of Grb2-related with insert domain (GRID) gene, e.g. a  
 CC hammerhead ribozyme, NCH ribozyme, G-cleaver ribozyme, Zinzyme, DNzyme,  
 CC amberzyme, inozyme or hairpin ribozyme. Also include are a mammalian cell  
 CC including the novel nucleic acid molecule, reducing GRID activity in a  
 CC cell by contacting the cell with the novel nucleic acid molecule,  
 CC treating a patient having a condition associated with the level of GRID  
 CC (e.g. tissue/graft rejection or leukaemia) by contacting the cell with  
 CC the novel nucleic acid molecule, cleaving RNA of a GRID gene by  
 CC contacting the cell with the novel nucleic acid molecule, an expression  
 CC vector comprising a nucleic acid sequences (encoding at least the novel  
 CC nucleic acid molecule in a manner that allows its expression), a  
 CC mammalian cell including the expression vector and an enzymatic nucleic  
 CC acid molecule that cleaves RNA derived from a GRID gene. The nucleic acid  
 CC molecule is useful for treating a condition associated with the level of  
 CC GRID, e.g. tissue/graft rejection and leukaemia. The present sequence is  
 CC a target region for the enzymatic nucleic acids of the invention.  
 XX  
 XX Sequence 17 BP; 3 A; 3 C; 10 G; 0 T; 1 U; 0 Other;  
 SQ

Query Match 3.0%; Score 13.4; DB 1; Length 17;  
 Best Local Similarity 93.3%; Pred. No. 3.6e+02;  
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 132 CTCGGCCTGCGGCT 146  
 Db 15 CTCGGCCTGCGGCT 1

RESULT 362  
 ADI86392/c  
 ID ADI86392 standard; RNA; 17 BP.  
 XX  
 XX ADI86392;  
 AC  
 XX  
 XX 03-JUN-2004 (first entry)  
 DT  
 XX  
 DE HCV DNzyme substrate sequence #3638.  
 KW  
 KW ss; enzymatic nucleic acid; RNA cleavage; hepatitis C virus; HCV;  
 KW HCV infection; type I interferon; DNzyme.  
 XX  
 XX Hepatitis C virus.  
 OS  
 XX  
 XX US2003125270-A1.  
 PN  
 XX  
 XX 03-JUL-2003.  
 PD  
 XX  
 PF 18-DEC-2000; 2000US-00740332.  
 XX  
 XX 18-DEC-2000; 2000US-00740332.  
 PR  
 XX  
 XX (BLATT/) BLATT L.  
 PA (MCSW/) MCSWIGGEN J.  
 PA (ROBE/) ROBERTS E.  
 PA (PAVC/) PAVCO P A.  
 PA (MACE/) MACEJACK D.  
 XX  
 XX Blatt L, Mcswiggen J, Roberts E, Pavco PA, Macejack D;  
 PI WPI; 2004-031273/03.  
 XX  
 XX Enzymatic nucleic acid molecules which specifically cleave RNA derived

PT from hepatitis C virus (HCV), useful for the treatment of HCV infections,  
 PT especially in combination with type I interferon therapy.  
 XX  
 XX Claim 1; SEQ ID NO 3638; 198pp; English.  
 PS  
 XX The invention relates to an enzymatic nucleic acid molecule which  
 CC specifically cleaves RNA derived from hepatitis C virus (HCV), in which  
 CC the binding arms of the enzymatic nucleic acid molecule comprises  
 CC sequences complementary to any of the defined substrate sequences given  
 CC in the specification. The nucleic acid molecule may be administered for  
 CC the treatment of HCV infections, especially in combination with type I  
 CC interferons. The present sequence represents a HCV DNzyme substrate  
 CC sequence.  
 XX  
 XX Sequence 17 BP; 2 A; 7 C; 6 G; 0 T; 2 U; 0 Other;  
 SQ

Query Match 3.0%; Score 13.4; DB 1; Length 17;  
 Best Local Similarity 93.3%; Pred. No. 3.6e+02;  
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 210 ACCTGCGGCGGTCG 224  
 Db 17 ACCTGCGGCGGTCG 3

RESULT 363  
 AAT89228/c  
 ID AAT89228 standard; DNA; 13 BP.  
 XX  
 XX AAT89228;  
 AC  
 XX  
 XX 21-OCT-2004 (revised)  
 DT  
 XX 12-MAY-1998 (first entry)  
 DT  
 DE Peptide nucleic acid 4, targeted to mammalian telomerase.  
 XX  
 KW Peptide nucleic acid; PNA; cancer; telomerase; probe; hybridisation;  
 KW inhibitor; ss.  
 XX  
 XX Synthetic.  
 OS  
 XX  
 XX Key Location/Qualifiers  
 PH modified\_base 1..13  
 FT /\*tag= a  
 FT /mod\_base= OTHER  
 FT /note= "Sugar-phosphate backbone has been replaced by a  
 FT peptide backbone"  
 FT  
 XX  
 XX WO9738013-A1.  
 PN  
 XX  
 XX 16-OCT-1997.  
 PD  
 XX  
 XX 09-APR-1997; 97WO-US005931.  
 PF  
 XX  
 XX 09-APR-1996; 96US-00630019.  
 PR  
 XX  
 XX (GERO-) GERON CORP.  
 PA  
 XX  
 XX Shay JW, Wright WE, Piatyszek MA, Corey D, Norton JC;  
 PI WPI; 1997-512647/47.  
 DR  
 XX  
 XX New peptide nucleic acids hybridising to mammalian telomerase RNA - used  
 PT to inhibit telomerase, for treating tumours and other proliferative  
 PT diseases, also for diagnosis.  
 PT  
 XX  
 XX Claim 9; Page 59; 76pp; English.  
 PS  
 XX This sequence is a novel peptide nucleic acid (PNA), which acts as an  
 CC inhibitor of mammalian, preferably human, telomerase. The PNAs hybridise  
 CC specifically to an RNA component of mammalian telomerase, and include the  
 CC sequence GGG for specific hybridisation to the template region of this  
 CC component. PNAs can be used as probes to detect the RNA component of



CC mammalian telomerase and as inhibitors of telomerase activity, especially  
CC in the treatment of cancer

CC Revised record issued on 21-OCT-2004 : Correction to feature table key

SQ Sequence 13 BP; 5 A; 1 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 2.9%; Score 13; DB 1; Length 13;

Best Local Similarity 100.0%; Pred. No. 2.8e+02;

Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 42 TTGTCTAACCTTA 54

Db 13 TTGTCTAACCTTA 1

RESULT 364

AAT89236/C

ID AAT89236 standard; DNA; 13 BP.

XX AC AAT89236;

DT 21-OCT-2004 (revised)

DT 12-MAY-1998 (first entry)

XX Peptide nucleic acid 11, targeted to mammalian telomerase.

XX Peptide nucleic acid; PNA; cancer; telomerase; probe; hybridisation;

KW inhibitor; ss.

XX Synthetic.

Key Location/Qualifiers

modified\_base 1..13

FT /\*tag= a

FT /mod\_base= OTHER

FT /note= "Sugar-phosphate backbone has been replaced by a

FT peptide backbone"

XX WO9738013-A1.

XX 16-OCT-1997.

XX 09-APR-1997; 97WO-US005931.

XX 09-APR-1996; 96US-00630019.

XX (GERO-) GERON CORP.

XX Shay JW, Wright WE, Piatyszek MA, Corey D, Norton JC;

XX WPI; 1997-512647/47.

XX New peptide nucleic acids hybridising to mammalian telomerase RNA - used

PT to inhibit telomerase, for treating tumours and other proliferative

PT diseases, also for diagnosis.

XX Claim 9; Page 59; 76pp; English.

XX This sequence is a novel peptide nucleic acid (PNA), which acts as an  
CC inhibitor of mammalian, preferably human, telomerase. The PNAs hybridise  
CC specifically to an RNA component of mammalian telomerase, and include the  
CC sequence GGG for specific hybridisation to the template region of this  
CC component. PNAs can be used as probes to detect the RNA component of  
CC mammalian telomerase and as inhibitors of telomerase activity, especially  
CC in the treatment of cancer

Revised record issued on 21-OCT-2004 : Correction to feature table key

SQ Sequence 13 BP; 3 A; 1 C; 5 G; 4 T; 0 U; 0 Other;

Query Match 2.9%; Score 13; DB 1; Length 13;

Best Local Similarity 100.0%; Pred. No. 2.8e+02;

Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 44 GTCTAACCTTAAC 56

Db 13 GTCTAACCTTAAC 1

RESULT 365

AAT89225/C

ID AAT89225 standard; DNA; 13 BP.

XX AC AAT89225;

DT 21-OCT-2004 (revised)

DT 12-MAY-1998 (first entry)

XX Peptide nucleic acid 1, targeted to mammalian telomerase.

XX Peptide nucleic acid; PNA; cancer; telomerase; probe; hybridisation;

KW inhibitor; ss.

XX Synthetic.

Key Location/Qualifiers

modified\_base 1..13

FT /\*tag= a

FT /mod\_base= OTHER

FT /note= "Sugar-phosphate backbone has been replaced by a

FT peptide backbone"

XX WO9738013-A1.

XX 16-OCT-1997.

XX 09-APR-1997; 97WO-US005931.

XX 09-APR-1996; 96US-00630019.

XX (GERO-) GERON CORP.

XX Shay JW, Wright WE, Piatyszek MA, Corey D, Norton JC;

XX WPI; 1997-512647/47.

XX New peptide nucleic acids hybridising to mammalian telomerase RNA - used

PT to inhibit telomerase, for treating tumours and other proliferative

PT diseases, also for diagnosis.

XX Claim 9; Page 59; 76pp; English.

XX This sequence is a novel peptide nucleic acid (PNA), which acts as an  
CC inhibitor of mammalian, preferably human, telomerase. The PNAs hybridise  
CC specifically to an RNA component of mammalian telomerase, and include the  
CC sequence GGG for specific hybridisation to the template region of this  
CC component. PNAs can be used as probes to detect the RNA component of  
CC mammalian telomerase and as inhibitors of telomerase activity, especially  
CC in the treatment of cancer

Revised record issued on 21-OCT-2004 : Correction to feature table key

SQ Sequence 13 BP; 3 A; 1 C; 5 G; 4 T; 0 U; 0 Other;

Query Match 2.9%; Score 13; DB 1; Length 13;

Best Local Similarity 100.0%; Pred. No. 2.8e+02;

Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 46 CTAACCTTAACCTG 58

Db 13 CTAACCTTAACCTG 1

RESULT 366

AAZ08815/C

```

ID  AAZ08815 standard; DNA; 13 BP.
XX  AC
XX  AAZ08815;
XX  DT
XX  01-NOV-1999 (first entry)
XX  DE
XX  Human RERF-LC-A1 hybridisable oligonucleotide.
XX  KW
XX  Human RERF-LC-A1; hybridisation; antitumour augmenting drug; telomerase;
XX  cancer; ss.
XX  OS
XX  Synthetic.
XX  OS
XX  Homo sapiens.
XX  PN
XX  JP11228451-A.
XX  PD
XX  24-AUG-1999.
XX  PF
XX  10-FEB-1998; 98JP-00044686.
XX  PR
XX  10-FEB-1998; 98JP-00044686.
XX  PA
XX  (KURE ) KUREHA CHEM IND CO LTD.
XX  DR
XX  WPI; 1999-522625/44.
XX  PT
XX  New composition - for anti-tumor augmenting agent.
XX  PS
XX  Example 1; Page 6; 8pp; Japanese.
XX  CC
XX  The present invention describes an antitumour augmenting agent comprising
XX  a hybridisable oligonucleotide, as an effective component, contained at
XX  the template region of RNA site contained in telomerase. Also described
XX  is an antitumour composition comprising the antitumour augmenting agent
XX  and an antitumour agent as effective components. The present sequence
XX  represents a hybridisable oligonucleotide for human RERF-LC-A1, used in
XX  the exemplification of the present invention. When the antitumour
XX  composition is administered into a mammal, especially human, a
XX  sufficient antitumour effect is exhibited to cancer cells
XX  SQ
XX  Sequence 13 BP; 5 A; 1 C; 4 G; 3 T; 0 U; 0 Other;
XX  Query Match 2.9%; Score 13; DB 1; Length 13;
XX  Best Local Similarity 100.0%; Pred. No. 2.8e+02;
XX  Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX  QY 42 TTGCTTAACCCCTA 54
XX  Db 13 TTGCTTAACCCCTA 1
XX  RESULT 367
XX  AAA37544/C
XX  ID AAA37544 standard; DNA; 13 BP.
XX  AC
XX  AAA37544;
XX  DT
XX  15-AUG-2000 (first entry)
XX  DE
XX  PNA sequence #1 used to inhibit telomerase activity.
XX  KW
XX  Peptide nucleic acid; PNA; telomerase; ribonucleoprotein enzyme; cancer;
XX  inhibitor; neoplasia; neurodegenerative disease; aging; hyperplasia;
XX  AIDS; HIV; fungal infection; forensic identification; detect; tumour;
XX  paternity testing; ss.
XX  OS
XX  Synthetic.
XX  FH
XX  Key Location/Qualifiers
XX  FT misc_feature 1. .13
XX  FT /*tag= a
XX  FT /note= "Peptide nucleic acid molecule, where N-(2-
XX  aminoethyl)glycine units are linked to nucleotide bases
via glycine amino N through a methylenecarbonyl linker"
FT  US6046307-A.
XX  PN
XX  XX
XX  PD 04-APR-2000.
XX  XX
XX  PF 09-APR-1997; 97US-00838545.
XX  PR
XX  09-APR-1996; 96US-00630019.
XX  PA
XX  (TEXA ) UNIV TEXAS SYSTEM.
XX  PI
XX  Wright WS, Piatyszek MA, Shay JW, Norton JC, Corey DR;
XX  WPI; 2000-292432/25.
XX  DR
XX  XX
XX  PT New peptide nucleic acid (PNA) compounds that inhibit telomerase activity
XX  in mammalian cells is useful as probes to detect the RNA component of a
XX  mammalian telomerase.
XX  PS
XX  Claim 6; Col 71; 45pp; English.
XX  CC
XX  The present sequence represents a peptide nucleic acid molecule which
XX  hybridises to the mRNA component of mammalian telomerase, and inhibits
XX  telomerase activity. Telomerase is a ribonucleoprotein enzyme that
XX  synthesizes one strand of the telomeric DNA, using as a template an 11
XX  nucleotide sequence contained within the RNA component of the enzyme. The
XX  invention relates to PNA molecules having a sequence of no more than 25
XX  bases, which include the sequence GTTAGG. The uncharged nature of the PNA
XX  backbone increases the melting temperature of associating strands,
XX  CC
XX  increases the rate of association with targeted nucleic acids, and
XX  affords greater resistance of degradation by proteases or nucleases. The
XX  therapeutic PNAs may be used for treating disease conditions such as
XX  cancers, neoplasia, hyperplasia, neurodegenerative diseases, aging, human
XX  immunodeficiency virus (HIV) infection/AIDS (acquired immunodeficiency
XX  syndrome) and associated pathologies, fungal infections, and other
XX  diseases characterized by abnormal telomere metabolism or telomerase
XX  activity, in combination with antineoplastic and other cytotoxic or
XX  cytostatic agents, antifungal agents, and other nucleotides. PNAs may be
XX  used for molecular diagnostics, labelled PNAs are used as hybridization
XX  probes to detect or quantitate polynucleotides having a human telomerase
XX  RNA (hTR) sequence. PNA probes are also used for forensic identification
XX  of individuals, e.g. paternity testing, based on hTR gene restriction
XX  fragment length polymorphism (RFLP) pattern. PNAs are also useful as
XX  probes to detect the RNA component of a mammalian telomerase and as
XX  inhibitors of telomerase activity. The method of the present invention
XX  allows cancerous conditions to be detected with increased confidence and
XX  possibly at an earlier stage, before cells are detected as cancerous
XX  based on pathological characteristics. The diagnostic and prognostic
XX  methods of the present invention can be used to detect an immortal or
XX  neoplastic cell or tumour tissue or cancer of any origin, provided the
XX  cell expresses telomerase activity and its RNA component
XX  SQ
XX  Sequence 13 BP; 3 A; 1 C; 5 G; 4 T; 0 U; 0 Other;
XX  Query Match 2.9%; Score 13; DB 1; Length 13;
XX  Best Local Similarity 100.0%; Pred. No. 2.8e+02;
XX  Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX  QY 46 CTAACCCCTAACCTG 58
XX  Db 13 CTAACCCCTAACCTG 1
XX  RESULT 368
XX  AAA37594/C
XX  ID AAA37594 standard; DNA; 13 BP.
XX  AC
XX  AAA37594;
XX  DT
XX  15-AUG-2000 (first entry)
XX  DE
XX  PNA sequence #52 used to inhibit telomerase activity.

```

XX Peptide nucleic acid; PNA; telomerase; ribonucleoprotein enzyme; cancer;  
 KW inhibitor; neoplasia; neurodegenerative disease; aging; hyperplasia;  
 KW AIDS; HIV; fungal infection; forensic identification; detect; tumour;  
 KW paternity testing; ss.  
 OS Synthetic.  
 XX  
 XX Key Location/Qualifiers  
 FH misc\_feature 1. .13  
 FT /tag= a  
 FT /note= "Peptide nucleic acid molecule, where N-(2-  
 FT aminoethyl)glycine units are linked to nucleotide bases  
 FT via glycine amino N through a methylenecarbonyl linker"  
 XX  
 XX US6046307-A.  
 XX  
 XX 04-APR-2000.  
 XX  
 XX 09-APR-1997; 97US-00838545.  
 XX  
 XX 09-APR-1996; 96US-00630019.  
 XX  
 XX (TEXA ) UNIV TEXAS SYSTEM.  
 XX  
 XX Wright WE, Piatyszek MA, Shay JW, Norton JC, Corey DR;  
 XX WPI; 2000-292432/25.  
 XX  
 XX New peptide nucleic acid (PNA) compounds that inhibit telomerase activity  
 PT in mammalian cells is useful as probes to detect the RNA component of a  
 PT mammalian telomerase.  
 XX  
 XX Example 2; Col 37; 45pp; English.  
 XX  
 XX The present sequence represents a peptide nucleic acid molecule which  
 CC hybridises to the mRNA component of mammalian telomerase, and inhibits  
 CC telomerase activity. Telomerase is a ribonucleoprotein enzyme that  
 CC synthesizes one strand of the telomeric DNA, using as a template an 11  
 CC nucleotide sequence contained within the RNA component of the enzyme. The  
 CC invention relates to PNA molecules having a sequence of no more than 25  
 CC bases, which include the sequence GTTAGG. The uncharged nature of the PNA  
 CC backbone increases the melting temperature of associating strands, and  
 CC affords greater resistance of degradation by proteases or nucleases. The  
 CC therapeutic PNAs may be used for treating disease conditions such as  
 CC cancers, neoplasia, hyperplasia, neurodegenerative diseases, aging, human  
 CC immunodeficiency virus (HIV) infection/AIDS (acquired immunodeficiency  
 CC syndrome) and associated pathologies, fungal infections, and other  
 CC diseases characterized by abnormal telomere metabolism or telomerase  
 CC activity, in combination with antineoplastic and other cytotoxic or  
 CC cytostatic agents, antifungal agents, and other nucleotides. PNAs may be  
 CC used for molecular diagnostics, labelled PNAs are used as hybridization  
 CC probes to detect or quantitate polynucleotides having a human telomerase  
 CC RNA (hTR) sequence. PNA probes are also used for forensic identification  
 CC of individuals, e.g. paternity testing, based on hTR gene restriction  
 CC fragment length polymorphism (RFLP) pattern. PNAs are also useful as  
 CC probes to detect the RNA component of a mammalian telomerase and as  
 CC inhibitors of telomerase activity. The method of the present invention  
 CC allows cancerous conditions to be detected with increased confidence and  
 CC possibly at an earlier stage, before cells are detected as cancerous  
 CC based on pathological characteristics. The diagnostic and prognostic  
 CC methods of the present invention can be used to detect an immortal or  
 CC neoplastic cell or tumour tissue or cancer of any origin, provided the  
 CC cell expresses telomerase activity and its RNA component  
 XX  
 XX Sequence 13 BP; 7 A; 1 C; 3 G; 2 T; 0 U; 0 Other;  
 Query Match 2.9%; Score 13; DB 1; Length 13;  
 Best Local Similarity 100.0%; Pred. No. 2.8e+02;  
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 . 39 TTTTGTCTAACC 51

Db 13 TTTTGTCTAACC 1  
 RESULT 369  
 AAA37598/C  
 ID AAA37598 standard; DNA; 13 BP.  
 XX  
 AC AAA37598;  
 XX  
 DT 15-AUG-2000 (first entry)  
 XX  
 DE PNA sequence #56 used to inhibit telomerase activity.  
 XX  
 KW Peptide nucleic acid; PNA; telomerase; ribonucleoprotein enzyme; cancer;  
 KW inhibitor; neoplasia; neurodegenerative disease; aging; hyperplasia;  
 KW AIDS; HIV; fungal infection; forensic identification; detect; tumour;  
 KW paternity testing; ss.  
 XX  
 OS Synthetic.  
 XX  
 XX Key Location/Qualifiers  
 FH misc\_feature 1. .13  
 FT /tag= a  
 FT /note= "Peptide nucleic acid molecule, where N-(2-  
 FT aminoethyl)glycine units are linked to nucleotide bases  
 FT via glycine amino N through a methylenecarbonyl linker"  
 XX  
 XX US6046307-A.  
 XX  
 XX 04-APR-2000.  
 XX  
 XX 09-APR-1997; 97US-00838545.  
 XX  
 XX 09-APR-1996; 96US-00630019.  
 XX  
 XX (TEXA ) UNIV TEXAS SYSTEM.  
 XX  
 XX Wright WE, Piatyszek MA, Shay JW, Norton JC, Corey DR;  
 XX WPI; 2000-292432/25.  
 XX  
 XX New peptide nucleic acid (PNA) compounds that inhibit telomerase activity  
 PT in mammalian cells is useful as probes to detect the RNA component of a  
 PT mammalian telomerase.  
 XX  
 XX Example 2; Col 37; 45pp; English.  
 XX  
 XX The present sequence represents a peptide nucleic acid molecule which  
 CC hybridises to the mRNA component of mammalian telomerase, and inhibits  
 CC telomerase activity. Telomerase is a ribonucleoprotein enzyme that  
 CC synthesizes one strand of the telomeric DNA, using as a template an 11  
 CC nucleotide sequence contained within the RNA component of the enzyme. The  
 CC invention relates to PNA molecules having a sequence of no more than 25  
 CC bases, which include the sequence GTTAGG. The uncharged nature of the PNA  
 CC backbone increases the melting temperature of associating strands, and  
 CC affords greater resistance of degradation by proteases or nucleases. The  
 CC therapeutic PNAs may be used for treating disease conditions such as  
 CC cancers, neoplasia, hyperplasia, neurodegenerative diseases, aging, human  
 CC immunodeficiency virus (HIV) infection/AIDS (acquired immunodeficiency  
 CC syndrome) and associated pathologies, fungal infections, and other  
 CC diseases characterized by abnormal telomere metabolism or telomerase  
 CC activity, in combination with antineoplastic and other cytotoxic or  
 CC cytostatic agents, antifungal agents, and other nucleotides. PNAs may be  
 CC used for molecular diagnostics, labelled PNAs are used as hybridization  
 CC probes to detect or quantitate polynucleotides having a human telomerase  
 CC RNA (hTR) sequence. PNA probes are also used for forensic identification  
 CC of individuals, e.g. paternity testing, based on hTR gene restriction  
 CC fragment length polymorphism (RFLP) pattern. PNAs are also useful as  
 CC probes to detect the RNA component of a mammalian telomerase and as  
 CC inhibitors of telomerase activity. The method of the present invention  
 CC allows cancerous conditions to be detected with increased confidence and  
 CC possibly at an earlier stage, before cells are detected as cancerous  
 CC based on pathological characteristics. The diagnostic and prognostic  
 CC methods of the present invention can be used to detect an immortal or  
 CC neoplastic cell or tumour tissue or cancer of any origin, provided the  
 CC cell expresses telomerase activity and its RNA component  
 XX

immunodeficiency virus (HIV) infection/AIDS (acquired immunodeficiency syndrome) and associated pathologies, fungal infections, and other diseases characterized by abnormal telomere metabolism or telomerase activity, in combination with antineoplastic and other cytotoxic or cytostatic agents, antifungal agents, and other nucleotides. PNAs may be used for molecular diagnostics, labelled PNAs are used as hybridization probes to detect or quantitate polynucleotides having a human telomerase RNA (hTR) sequence. PNA probes are also used for forensic identification of individuals, e.g. paternity testing, based on hTR gene restriction fragment length polymorphism (RFLP) pattern. PNAs are also useful as probes to detect the RNA component of a mammalian telomerase and as inhibitors of telomerase activity. The method of the present invention allows cancerous conditions to be detected with increased confidence and possibly at an earlier stage, before cells are detected as cancerous based on pathological characteristics. The diagnostic and prognostic methods of the present invention can be used to detect an immortal or neoplastic cell or tumour tissue or cancer of any origin, provided the cell expresses telomerase activity and its RNA component

XX  
SQ Sequence 13 BP; 8 A; 1 C; 2 G; 2 T; 0 U; 0 Other;

Query Match 2.9%; Score 13; DB 1; Length 13;  
Best Local Similarity 100.0%; Pred. No. 2.8e+02; Gaps 0;  
Matches 13; Conservative 0; Mismatches 0; Indels 0;

QY 38 TTTTGTCTAAC 50  
|||||  
DB 13 TTTTGTCTAAC 1

RESULT 371  
AAA37588/c  
ID AAA37588 standard; DNA; 13 BP.  
AC  
AC AAA37588;  
XX  
DT 15-AUG-2000 (first entry)  
XX  
DE Antisense sequence #46 used to inhibit telomerase activity.  
XX  
XX Peptide nucleic acid; PNA; telomerase; ribonucleoprotein enzyme; cancer;  
KW inhibitor; neoplasia; neurodegenerative disease; aging; hyperplasia;  
KW AIDS; HIV; fungal infection; forensic identification; detect; tumour;  
KW paternity testing; ss.  
XX  
OS Synthetic.  
XX  
XX  
FH Key Location/Qualifiers  
FT misc\_feature 1..13  
FT /\*tag= a  
FT /\*note= "Phosphorothioate internucleotide linkages"  
XX  
XX US6046307-A.  
XX PN  
XX PD 04-APR-2000.  
XX  
XX 09-APR-1997; 97US-00838545.  
XX PF  
XX 09-APR-1996; 96US-00630019.  
XX PR  
XX (TEXA ) UNIV TEXAS SYSTEM.  
XX PA  
XX  
XX  
PI Wright WE, Piatyszek MA, Shay JW, Norton JC, Corey DR;  
XX  
XX WPI; 2000-292432/25.  
XX DR  
XX  
XX New peptide nucleic acid (PNA) compounds that inhibit telomerase activity  
PT in mammalian cells is useful as probes to detect the RNA component of a  
PT mammalian telomerase.  
XX  
XX Example 1; Col 27-28; 45pp; English.  
XX  
XX The present sequence represents an antisense oligonucleotide used as a

control sequence alongside a peptide nucleic acid molecule which hybridises to the mRNA component of mammalian telomerase, and inhibits telomerase activity. Telomerase is a ribonucleoprotein enzyme that synthesizes one strand of the telomeric DNA, using as a template an 11 nucleotide sequence contained within the RNA component of the enzyme. The invention relates to PNA molecules having a sequence of no more than 25 bases, which include the sequence GTTAGG. The uncharged nature of the PNA backbone increases the melting temperature of associating strands, and increases the rate of association with targeted nucleic acids, and affords greater resistance of degradation by proteases or nucleases. The therapeutic PNAs may be used for treating disease conditions such as cancers, neoplasia, hyperplasia, neurodegenerative diseases, aging, human immunodeficiency virus (HIV) infection/AIDS (acquired immunodeficiency syndrome) and associated pathologies, fungal infections, and other diseases characterized by abnormal telomere metabolism or telomerase activity, in combination with antineoplastic and other cytotoxic or cytostatic agents, antifungal agents, and other nucleotides. PNAs may be used for molecular diagnostics, labelled PNAs are used as hybridization probes to detect or quantitate polynucleotides having a human telomerase RNA (hTR) sequence. PNA probes are also used for forensic identification of individuals, e.g. paternity testing, based on hTR gene restriction fragment length polymorphism (RFLP) pattern. PNAs are also useful as probes to detect the RNA component of a mammalian telomerase and as inhibitors of telomerase activity. The method of the present invention allows cancerous conditions to be detected with increased confidence and possibly at an earlier stage, before cells are detected as cancerous based on pathological characteristics. The diagnostic and prognostic methods of the present invention can be used to detect an immortal or neoplastic cell or tumour tissue or cancer of any origin, provided the cell expresses telomerase activity and its RNA component

XX Sequence 13 BP; 5 A; 1 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 2.9%; Score 13; DB 1; Length 13;  
Best Local Similarity 100.0%; Pred. No. 2.8e+02;  
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 42 TTGCTAACCTTA 54  
Db 13 TTGCTAACCTTA 1

RESULT 372  
AAA37597/C  
ID AAA37597 standard; DNA; 13 BP.  
XX AAA37597;  
XX 15-AUG-2000 (first entry)  
XX PNA sequence #55 used to inhibit telomerase activity.  
XX Peptide nucleic acid; PNA; telomerase; ribonucleoprotein enzyme; cancer;  
XX inhibitor; neoplasia; neurodegenerative disease; aging; hyperplasia;  
KW AIDS; HIV; fungal infection; forensic identification; detect; tumour;  
KW paternity testing; ss.  
XX Synthetic.  
XX Key Location/Qualifiers  
FT misc\_feature 1..13  
FT /tag= a  
FT /note= "Peptide nucleic acid molecule, where N-(2-aminoethyl)glycine units are linked to nucleotide bases via glycine amino N through a methylenecarbonyl linker"  
XX US6046307-A.  
PN  
XX  
XX 04-APR-2000.  
XX  
XX 09-APR-1997; 97US-00838545.  
XX  
XX 09-APR-1996; 96US-00630019.  
PR

(TEXA ) UNIV TEXAS SYSTEM.  
Wright WE, Piatyszek MA, Shay JW, Norton JC, Corey DR;  
WPI; 2000-292432/25.  
New peptide nucleic acid (PNA) compounds that inhibit telomerase activity in mammalian cells is useful as probes to detect the RNA component of a mammalian telomerase.  
Example 2; Col 37; 45pp; English.  
The present sequence represents a peptide nucleic acid molecule which hybridises to the mRNA component of mammalian telomerase, and inhibits telomerase activity. Telomerase is a ribonucleoprotein enzyme that synthesizes one strand of the telomeric DNA, using as a template an 11 nucleotide sequence contained within the RNA component of the enzyme. The invention relates to PNA molecules having a sequence of no more than 25 bases, which include the sequence GTTAGG. The uncharged nature of the PNA backbone increases the melting temperature of associating strands, and increases the rate of association with targeted nucleic acids, and affords greater resistance of degradation by proteases or nucleases. The therapeutic PNAs may be used for treating disease conditions such as cancers, neoplasia, hyperplasia, neurodegenerative diseases, aging, human immunodeficiency virus (HIV) infection/AIDS (acquired immunodeficiency syndrome) and associated pathologies, fungal infections, and other diseases characterized by abnormal telomere metabolism or telomerase activity, in combination with antineoplastic and other cytotoxic or cytostatic agents, antifungal agents, and other nucleotides. PNAs may be used for molecular diagnostics, labelled PNAs are used as hybridization probes to detect or quantitate polynucleotides having a human telomerase RNA (hTR) sequence. PNA probes are also used for forensic identification of individuals, e.g. paternity testing, based on hTR gene restriction fragment length polymorphism (RFLP) pattern. PNAs are also useful as probes to detect the RNA component of a mammalian telomerase and as inhibitors of telomerase activity. The method of the present invention allows cancerous conditions to be detected with increased confidence and possibly at an earlier stage, before cells are detected as cancerous based on pathological characteristics. The diagnostic and prognostic methods of the present invention can be used to detect an immortal or neoplastic cell or tumour tissue or cancer of any origin, provided the cell expresses telomerase activity and its RNA component

XX Sequence 13 BP; 2 A; 5 C; 1 G; 5 T; 0 U; 0 Other;

Query Match 2.9%; Score 13; DB 1; Length 13;  
Best Local Similarity 100.0%; Pred. No. 2.8e+02;  
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 53 TAACTGAGAGGG 65  
Db 13 TAACTGAGAGGG 1

RESULT 373  
AAA37555/C  
ID AAA37555 standard; DNA; 13 BP.  
XX AAA37555;  
XX 15-AUG-2000 (first entry)  
XX PNA sequence #12 used to inhibit telomerase activity.  
XX Peptide nucleic acid; PNA; telomerase; ribonucleoprotein enzyme; cancer;  
KW inhibitor; neoplasia; neurodegenerative disease; aging; hyperplasia;  
KW AIDS; HIV; fungal infection; forensic identification; detect; tumour;  
KW paternity testing; ss.  
XX Synthetic.  
XX Key Location/Qualifiers  
FH

```
FT misc_feature 1. .13
FT /*tag= a
FT /note= "Peptide nucleic acid molecule, where N-(2-
FT aminoethyl)glycine units are linked to nucleotide bases
FT via glycine amino N through a methylenecarbonyl linker"
XX
XX US6046307-A.
XX 04-APR-2000.
XX
XX 09-APR-1997; 97US-00838545.
XX
XX 09-APR-1996; 96US-00630019.
XX (TEXA ) UNIV TEXAS SYSTEM.
XX
XX Wright WE, Piatyszek MA, Shay JW, Norton JC, Corey DR;
XX WPI; 2000-292432/25.
XX
XX New peptide nucleic acid (PNA) compounds that inhibit telomerase activity
XX in mammalian cells is useful as probes to detect the RNA component of a
XX mammalian telomerase.
XX
XX Claim 6; Col 71; 45pp; English.
XX
XX The present sequence represents a peptide nucleic acid molecule which
XX hybridises to the mRNA component of mammalian telomerase, and inhibits
XX telomerase activity. Telomerase is a ribonucleoprotein enzyme that
XX synthesizes one strand of the telomeric DNA, using as a template an 11
XX nucleotide sequence contained within the RNA component of the enzyme. The
XX invention relates to PNA molecules having a sequence of no more than 25
XX bases, which include the sequence GTTAGG. The uncharged nature of the PNA
XX backbone increases the melting temperature of associating strands,
XX increases the rate of association with targeted nucleic acids, and
XX affords greater resistance of degradation by proteases or nucleases. The
XX therapeutic PNAs may be used for treating disease conditions such as
XX cancers, neoplasia, hyperplasia, neurodegenerative diseases, aging, human
XX immunodeficiency virus (HIV) infection/Aids (acquired immunodeficiency
XX syndrome) and associated pathologies, fungal infections, and other
XX diseases characterized by abnormal telomere metabolism or telomerase
XX activity, in combination with antineoplastic and other cytotoxic or
XX cytostatic agents, antifungal agents, and other nucleotides. PNAs may be
XX used for molecular diagnostics, labelled PNAs are used as hybridization
XX probes to detect the RNA component of a mammalian telomerase and as
XX inhibitors of telomerase activity. The method of the present invention
XX allows cancerous conditions to be detected with increased confidence and
XX possibly at an earlier stage, before cells are detected as cancerous
XX based on pathological characteristics. The diagnostic and prognostic
XX methods of the present invention can be used to detect an immortal or
XX neoplastic cell or tumour tissue or cancer of any origin, provided the
XX cell expresses telomerase activity and its RNA component
XX
XX Sequence 13 BP; 3 A; 1 C; 5 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 2.9%; Score 13; DB 1; Length 13;
XX Best Local Similarity 100.0%; Pred. No. 2.8e+02;
XX Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX 44 GTCTAACCTTAAC 56
XX |||||
XX 13 GTCTAACCTTAAC 1
XX
XX RESULT 374
XX AAA37547/c
XX ID AAA37547 standard; DNA; 13 BP.
XX
XX XX
XX AC AAA37547;
```

```
XX
XX 15-AUG-2000 (first entry)
XX
XX PNA sequence #4 used to inhibit telomerase activity.
XX
XX Peptide nucleic acid; PNA; telomerase; ribonucleoprotein enzyme; cancer;
XX inhibitor; neoplasia; neurodegenerative disease; aging; hyperplasia;
XX AIDS; HIV; fungal infection; forensic identification; detect; tumour;
XX paternity testing; ss.
XX
XX Synthetic.
XX
XX Key misc_feature 1. .13
XX Location/Qualifiers
XX FT /*tag= a
XX FT /note= "Peptide nucleic acid molecule, where N-(2-
XX aminoethyl)glycine units are linked to nucleotide bases
XX via glycine amino N through a methylenecarbonyl linker"
XX
XX US6046307-A.
XX 04-APR-2000.
XX
XX 09-APR-1997; 97US-00838545.
XX
XX 09-APR-1996; 96US-00630019.
XX (TEXA ) UNIV TEXAS SYSTEM.
XX
XX Wright WE, Piatyszek MA, Shay JW, Norton JC, Corey DR;
XX WPI; 2000-292432/25.
XX
XX New peptide nucleic acid (PNA) compounds that inhibit telomerase activity
XX in mammalian cells is useful as probes to detect the RNA component of a
XX mammalian telomerase.
XX
XX Example 1; Col 28; 45pp; English.
XX
XX The present sequence represents a peptide nucleic acid molecule which
XX hybridises to the mRNA component of mammalian telomerase, and inhibits
XX telomerase activity. Telomerase is a ribonucleoprotein enzyme that
XX synthesizes one strand of the telomeric DNA, using as a template an 11
XX nucleotide sequence contained within the RNA component of the enzyme. The
XX invention relates to PNA molecules having a sequence of no more than 25
XX bases, which include the sequence GTTAGG. The uncharged nature of the PNA
XX backbone increases the melting temperature of associating strands,
XX increases the rate of association with targeted nucleic acids, and
XX affords greater resistance of degradation by proteases or nucleases. The
XX therapeutic PNAs may be used for treating disease conditions such as
XX cancers, neoplasia, hyperplasia, neurodegenerative diseases, aging, human
XX immunodeficiency virus (HIV) infection/Aids (acquired immunodeficiency
XX syndrome) and associated pathologies, fungal infections, and other
XX diseases characterized by abnormal telomere metabolism or telomerase
XX activity, in combination with antineoplastic and other cytotoxic or
XX cytostatic agents, antifungal agents, and other nucleotides. PNAs may be
XX used for molecular diagnostics, labelled PNAs are used as hybridization
XX probes to detect or quantitate polynucleotides having a human telomerase
XX RNA (htr) sequence. PNA probes are also used for forensic identification
XX of individuals, e.g. paternity testing, based on htr gene restriction
XX fragment length polymorphism (RFLP) pattern. PNAs are also useful as
XX probes to detect the RNA component of a mammalian telomerase and as
XX inhibitors of telomerase activity. The method of the present invention
XX allows cancerous conditions to be detected with increased confidence and
XX possibly at an earlier stage, before cells are detected as cancerous
XX based on pathological characteristics. The diagnostic and prognostic
XX methods of the present invention can be used to detect an immortal or
XX neoplastic cell or tumour tissue or cancer of any origin, provided the
XX cell expresses telomerase activity and its RNA component
XX
XX Sequence 13 BP; 5 A; 1 C; 4 G; 3 T; 0 U; 0 Other;
```

Query Match 2.9%; Score 13; DB 1; Length 13;



CC suspects or unknown descendants based on the hTR gene RFLP pattern. The  
 CC PNA can be further used for treating or preventing cancer, inflammation,  
 CC lymphoproliferative diseases, autoimmune disease, or neurodegenerative  
 CC diseases. The PNAs in combination with other pharmaceuticals (such as  
 CC antineoplastic or cytostatic agents) can be used for treating neoplasia,  
 CC hyperplasia, human immunodeficiency virus (HIV) infections, acquired  
 CC immunodeficiency syndrome (AIDS) and associated pathologies, and other  
 CC diseases characterised by abnormal telomere metabolism or telomerase  
 CC activity. The present sequence represents one of the PNA sequences of the  
 CC invention. Note: The present sequence represents SEQ ID No 4 in the SEQ  
 CC ID listing and column 4. However, table 1 in column 29 shows three  
 CC sequences with SEQ ID No 4. The first SEQ ID No 4 (PNA #6, AAS15423)  
 CC appears to be identical to SEQ ID No 1 in the claims and the SEQ ID  
 CC listing. The second SEQ ID No 4 in table 1 appears to be identical to SEQ  
 CC ID No 41 (PNA #8, AAS15454) in the SEQ ID listing. The third SEQ ID 4 is  
 CC the present sequence and appears to be identical to SEQ ID No 4 in the  
 CC SEQ ID listing and in column 4  
 XX  
 SQ Sequence 13 BP; 5 A; 1 C; 4 G; 3 T; 0 U; 0 Other;  
 Query Match 2.9%; Score 13; DB 1; Length 13;  
 Best Local Similarity 100.0%; Pred. No. 2.8e+02;  
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 42 TTGCTAACCCCTA 54  
 Db 13 TTGCTAACCCCTA 1  
 RESULT 377  
 AAS15433/c  
 ID AAS15433 standard; DNA; 13 BP.  
 XX  
 AC AAS15433;  
 XX  
 XX 14-FEB-2002 (first entry)  
 DT  
 DE PNA 6/X inhibiting human and mammalian telomerase activity.  
 XX  
 KW Mammalian; peptide nucleic acid; probe; forensic; paternity testing;  
 KW human telomerase RNA component; hTR gene RFLP pattern; cancer;  
 KW inflammation; lymphoproliferative disease; autoimmune disease;  
 KW neurodegenerative disease; neoplasia; hyperplasia; HIV; AIDS;  
 KW human immunodeficiency virus; acquired immunodeficiency syndrome;  
 KW telomere metabolism; mutant; cytostatic; anti-inflammatory;  
 KW immunosuppressive; polyamide backbone; ss.  
 XX  
 OS Homo sapiens.  
 OS Synthetic.  
 XX  
 FH Key Location/Qualifiers  
 FT modified\_base 1..13  
 FT /\*tag= a  
 FT /note= "This sequence is a peptide nucleic acid, i.e. it  
 FT contains a polyamide backbone instead of a deoxyribose  
 FT backbone"  
 XX  
 XX US6294650-B1.  
 XX  
 PD 25-SEP-2001.  
 XX  
 XX 08-JUL-1999; 99US-00349532.  
 XX  
 PR 09-APR-1996; 96US-00630019.  
 DR 03-APR-1997; 97US-00838545.  
 XX  
 XX (TEXA ) UNIV TEXAS SYSTEM.  
 XX  
 XX Shay JW, Wright WE, Piatyszek MA, Corey DR, Norton JC;  
 XX WPI; 2001-638024/73.  
 DR  
 XX New peptide nucleic acids that hybridizes to the RNA component of

PT mammalian telomerase, useful for treating or preventing cancer, or  
 PT inflammation, lymphoproliferative diseases, autoimmune disease, or  
 PT neurodegenerative diseases.  
 PS Claim 7; Col 73; 46pp; English.  
 XX  
 CC The present invention relates to peptide nucleic acids (PNAs), comprising  
 CC a sequence of 6-25 nucleobases, that inhibit telomerase activity in  
 CC mammalian cells by hybridising to the RNA component of mammalian  
 CC telomerase. The PNAs are useful as probes to detect the RNA component of  
 CC mammalian telomerase and as inhibitors of telomerase activity, or to  
 CC detect and/or quantitate polynucleotide having the human telomerase RNA  
 CC component (hTR) sequence, as well as in forensic identification of  
 CC individuals, such as paternity testing or identification of criminal  
 CC suspects or unknown descendants based on the hTR gene RFLP pattern. The  
 CC PNA can be further used for treating or preventing cancer, inflammation,  
 CC lymphoproliferative diseases, autoimmune disease, or neurodegenerative  
 CC diseases. The PNAs in combination with other pharmaceuticals (such as  
 CC antineoplastic or cytostatic agents) can be used for treating neoplasia,  
 CC hyperplasia, human immunodeficiency virus (HIV) infections, acquired  
 CC immunodeficiency syndrome (AIDS) and associated pathologies, and other  
 CC diseases characterised by abnormal telomere metabolism or telomerase  
 CC activity. The present sequence represents one of the PNA sequences of the  
 CC invention  
 XX  
 SQ Sequence 13 BP; 3 A; 1 C; 5 G; 4 T; 0 U; 0 Other;  
 Query Match 2.9%; Score 13; DB 1; Length 13;  
 Best Local Similarity 100.0%; Pred. No. 2.8e+02;  
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 44 GTCTAACCCCTAAC 56  
 Db 13 GTCTAACCCCTAAC 1  
 RESULT 378  
 AAS15469/c  
 ID AAS15469 standard; DNA; 13 BP.  
 XX  
 AC AAS15469;  
 XX  
 XX 14-FEB-2002 (first entry)  
 DT  
 DE PNA 13 inhibiting human and mammalian telomerase activity.  
 XX  
 KW Mammalian; peptide nucleic acid; probe; forensic; paternity testing;  
 KW human telomerase RNA component; hTR gene RFLP pattern; cancer;  
 KW inflammation; lymphoproliferative disease; autoimmune disease;  
 KW neurodegenerative disease; neoplasia; hyperplasia; HIV; AIDS;  
 KW human immunodeficiency virus; acquired immunodeficiency syndrome;  
 KW telomere metabolism; mutant; cytostatic; anti-inflammatory;  
 KW immunosuppressive; polyamide backbone; ss.  
 XX  
 OS Homo sapiens.  
 OS Synthetic.  
 XX  
 FH Key Location/Qualifiers  
 FT modified\_base 1..13  
 FT /\*tag= a  
 FT /note= "This sequence is a peptide nucleic acid, i.e. it  
 FT contains a polyamide backbone instead of a deoxyribose  
 FT backbone"  
 XX  
 XX US6294650-B1.  
 XX  
 PD 25-SEP-2001.  
 XX  
 XX 08-JUL-1999; 99US-00349532.  
 XX  
 PR 09-APR-1996; 96US-00630019.  
 DR 09-APR-1997; 97US-00838545.  
 XX



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PA (TEXA ) UNIV TEXAS SYSTEM.
XX Shay JW, Wright WE, Piatyszek MA, Corey DR, Norton JC;
XX WPI; 2001-638024/73.
XX
XX New peptide nucleic acids that hybridizes to the RNA component of
XX mammalian telomerase, useful for treating or preventing cancer,
XX inflammation, lymphoproliferative diseases, autoimmune disease, or
XX neurodegenerative diseases.
XX
XX Example 2; Col 37-38; 46pp; English.
XX
XX The present invention relates to peptide nucleic acids (PNAs), comprising
XX a sequence of 6-25 nucleobases, that inhibit telomerase activity in
XX mammalian cells by hybridising to the RNA component of mammalian
XX telomerase. The PNAs are useful as probes to detect the RNA component of
XX mammalian telomerase and as inhibitors of telomerase activity, or to
XX detect and/or quantitate polynucleotide having the human telomerase RNA
XX component (hTR) sequence, as well as in forensic identification of
XX individuals, such as paternity testing or identification of criminal
XX suspects or unknown descendants based on the hTR gene RFLP pattern. The
XX PNA can be further used for treating or preventing cancer, inflammation,
XX lymphoproliferative diseases, autoimmune disease, or neurodegenerative
XX diseases. The PNAs in combination with other pharmaceuticals (such as
XX antineoplastic or cytostatic agents) can be used for treating neoplasia,
XX hyperplasia, human immunodeficiency virus (HIV) infections, acquired
XX immunodeficiency syndrome (AIDS) and associated pathologies, and other
XX diseases characterised by abnormal telomere metabolism or telomerase
XX activity. The present sequence represents one of the PNA sequences of the
XX invention
XX
XX Sequence 13 BP; 1 A; 6 C; 2 G; 4 T; 0 U; 0 Other;
SQ
Query Match 2.9%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 2.8e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 55 ACTGAGAGGGCG 67
DB 13 ACTGAGAGGGCG 1
|||||
|||||

RESULT 379
AAS15465/c
ID AAS15465 standard; DNA; 13 BP.
XX
XX AAS15465;
XX
XX 14-FEB-2002 (first entry)
XX
XX PNA 3 inhibiting human and mammalian telomerase activity.
XX
XX Mammalian; peptide nucleic acid; probe; forensic; paternity testing;
XX human telomerase RNA component; hTR gene RFLP pattern; cancer;
XX inflammation; lymphoproliferative disease; autoimmune disease;
XX neurodegenerative disease; neoplasia; hyperplasia; HIV; AIDS;
XX human immunodeficiency virus; acquired immunodeficiency syndrome;
XX telomere metabolism; mutant; cytostatic; anti-inflammatory;
XX immunosuppressive; polyamide backbone; ss.
XX
XX Homo sapiens.
XX Synthetic.
XX
XX Key Location/Qualifiers
XX modified_base 1..13
XX /tag= a
XX /note= "This sequence is a peptide nucleic acid, i.e. it
XX contains a polyamide backbone instead of a deoxyribose
XX backbone"
XX
XX US6294650-B1.
XX

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PD 25-SEP-2001.
XX
XX 08-JUL-1999; 99US-00349532.
XX
XX 09-APR-1996; 96US-00630019.
XX 03-APR-1997; 97US-00838545.
XX
XX (TEXA ) UNIV TEXAS SYSTEM.
XX
XX Shay JW, Wright WE, Piatyszek MA, Corey DR, Norton JC;
XX WPI; 2001-638024/73.
XX
XX New peptide nucleic acids that hybridizes to the RNA component of
XX mammalian telomerase, useful for treating or preventing cancer,
XX inflammation, lymphoproliferative diseases, autoimmune disease, or
XX neurodegenerative diseases.
XX
XX Example 2; Col 37-38; 46pp; English.
XX
XX The present invention relates to peptide nucleic acids (PNAs), comprising
XX a sequence of 6-25 nucleobases, that inhibit telomerase activity in
XX mammalian cells by hybridising to the RNA component of mammalian
XX telomerase. The PNAs are useful as probes to detect the RNA component of
XX mammalian telomerase and as inhibitors of telomerase activity, or to
XX detect and/or quantitate polynucleotide having the human telomerase RNA
XX component (hTR) sequence, as well as in forensic identification of
XX individuals, such as paternity testing or identification of criminal
XX suspects or unknown descendants based on the hTR gene RFLP pattern. The
XX PNA can be further used for treating or preventing cancer, inflammation,
XX lymphoproliferative diseases, autoimmune disease, or neurodegenerative
XX diseases. The PNAs in combination with other pharmaceuticals (such as
XX antineoplastic or cytostatic agents) can be used for treating neoplasia,
XX hyperplasia, human immunodeficiency virus (HIV) infections, acquired
XX immunodeficiency syndrome (AIDS) and associated pathologies, and other
XX diseases characterised by abnormal telomere metabolism or telomerase
XX activity. The present sequence represents one of the PNA sequences of the
XX invention
XX
XX Sequence 13 BP; 7 A; 1 C; 3 G; 2 T; 0 U; 0 Other;
SQ
Query Match 2.9%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 2.8e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 39 TTTTGTCTAACC 51
DB 13 TTTTGTCTAACC 1
|||||
|||||

RESULT 380
AAS15423/c
ID AAS15423 standard; DNA; 13 BP.
XX
XX AAS15423;
XX
XX 14-FEB-2002 (first entry)
XX
XX PNA 8/VI inhibiting human and mammalian telomerase activity.
XX
XX Mammalian; peptide nucleic acid; probe; forensic; paternity testing;
XX human telomerase RNA component; hTR gene RFLP pattern; cancer;
XX inflammation; lymphoproliferative disease; autoimmune disease;
XX neurodegenerative disease; neoplasia; hyperplasia; HIV; AIDS;
XX human immunodeficiency virus; acquired immunodeficiency syndrome;
XX telomere metabolism; mutant; cytostatic; anti-inflammatory;
XX immunosuppressive; polyamide backbone; ss.
XX
XX Homo sapiens.
XX Synthetic.
XX
XX Key Location/Qualifiers
XX modified_base 1..13
XX
XX
XX
XX

```

```
FT FT /*tag= a
FT /note= "this sequence is a peptide nucleic acid, i.e. it
FT contains a polyamide backbone instead of a deoxyribose
FT backbone"
PN US6294650-B1.
XX
XX 25-SEP-2001.
XX
XX 08-JUL-1999; 99US-00349532.
XX
XX 09-APR-1996; 96US-00630019.
XX
XX 09-APR-1997; 97US-00838545.
XX
XX (TEXA ) UNIV TEXAS SYSTEM.
XX
XX Shay JW, Wright WE, Piatyszek MA, Corey DR, Norton JC;
XX WPI; 2001-638024/73.
XX
XX New peptide nucleic acids that hybridizes to the RNA component of
XX mammalian telomerase, useful for treating or preventing cancer, or
XX inflammation, lymphoproliferative diseases, autoimmune disease, or
XX neurodegenerative diseases.
XX
XX Claim 7; Col 73; 46pp; English.
XX
XX The present invention relates to peptide nucleic acids (PNAs), comprising
XX a sequence of 6-25 nucleobases, that inhibit telomerase activity in
XX mammalian cells by hybridising to the RNA component of mammalian
XX telomerase. The PNAs are useful as probes to detect the RNA component of
XX mammalian telomerase and as inhibitors of telomerase activity, or to
XX detect and/or quantitate polynucleotide having the human telomerase RNA
XX component (hTR) sequence, as well as in forensic identification of
XX individuals, such as paternity testing or identification of criminal
XX suspects or unknown descendants based on the hTR gene RFLP pattern. The
XX PNA can be further used for treating or preventing cancer, inflammation,
XX lymphoproliferative diseases, autoimmune disease, or neurodegenerative
XX diseases. The PNAs in combination with other pharmaceuticals (such as
XX antineoplastic or cytostatic agents) can be used for treating neoplasia,
XX hyperplasia, human immunodeficiency virus (HIV) infections, acquired
XX immunodeficiency syndrome (AIDS) and associated pathologies, and other
XX diseases characterised by abnormal telomere metabolism or telomerase
XX activity. The present sequence represents one of the PNA sequences of the
XX invention. Note: The present sequence represents SED ID No 1 but is shown
XX as the first SEQ ID No 4 in table 1 (column 25)
XX
XX Sequence 13 BP; 3 A; 1 C; 5 G; 4 T; 0 U; 0 Other;
XX
Query Match 2.9%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 2.8e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 46 CTAACCCCTAACTG 58
Db 13 CTAACCCCTAACTG 1
|||||
|||||

RESULT 381
AAS15459/c
ID AAS15459 standard; DNA; 13 BP.
XX
XX AAS15459;
XX
XX 14-FEB-2002 (first entry)
XX
XX Phosphorothioate (PS) oligomer III used to inhibit telomerase activity.
XX
XX Mammalian; forensic; paternity testing; human telomerase RNA component;
XX hTR gene RFLP pattern; cancer; inflammation; lymphoproliferative disease;
XX autoimmune disease; neurodegenerative disease; neoplasia; hyperplasia;
XX HIV; AIDS; human immunodeficiency virus; telomere metabolism; mutant;
XX acquired immunodeficiency syndrome; cytostatic; anti-inflammatory;
```

```
XX immunosuppressive; phosphorothioate; ss.
XX
XX Homo sapiens.
XX Synthetic.
XX
XX Key Location/Qualifiers
XX modified_base 1..13
XX /*tag= a
XX /label= OTHER
XX /note= "Phosphorothioate internucleotide linkages"
XX
XX US6294650-B1.
XX
XX 25-SEP-2001.
XX
XX 08-JUL-1999; 99US-00349532.
XX
XX 09-APR-1996; 96US-00630019.
XX
XX 09-APR-1997; 97US-00838545.
XX
XX (TEXA ) UNIV TEXAS SYSTEM.
XX
XX Shay JW, Wright WE, Piatyszek MA, Corey DR, Norton JC;
XX WPI; 2001-638024/73.
XX
XX New peptide nucleic acids that hybridizes to the RNA component of
XX mammalian telomerase, useful for treating or preventing cancer, or
XX inflammation, lymphoproliferative diseases, autoimmune disease, or
XX neurodegenerative diseases.
XX
XX Example 1; Col 29; 46pp; English.
XX
XX The present invention relates to peptide nucleic acids (PNAs), comprising
XX a sequence of 6-25 nucleobases, that inhibit telomerase activity in
XX mammalian cells by hybridising to the RNA component of mammalian
XX telomerase. The PNAs are useful as probes to detect the RNA component of
XX mammalian telomerase and as inhibitors of telomerase activity, or to
XX detect and/or quantitate polynucleotide having the human telomerase RNA
XX component (hTR) sequence, as well as in forensic identification of
XX individuals, such as paternity testing or identification of criminal
XX suspects or unknown descendants based on the hTR gene RFLP pattern. The
XX PNA can be further used for treating or preventing cancer, inflammation,
XX lymphoproliferative diseases, autoimmune disease, or neurodegenerative
XX diseases. The PNAs in combination with other pharmaceuticals (such as
XX antineoplastic or cytostatic agents) can be used for treating neoplasia,
XX hyperplasia, human immunodeficiency virus (HIV) infections, acquired
XX immunodeficiency syndrome (AIDS) and associated pathologies, and other
XX diseases characterised by abnormal telomere metabolism or telomerase
XX activity. The present sequence represents a phosphorothioate (PS)
XX oligomer used to inhibit telomerase activity in the methods of the
XX present invention
XX
XX Sequence 13 BP; 5 A; 1 C; 4 G; 3 T; 0 U; 0 Other;
XX
Query Match 2.9%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 2.8e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 42 TTGCTCTAACCCCTA 54
Db 13 TTGCTCTAACCCCTA 1
|||||
|||||

RESULT 382
AAS15464/c
ID AAS15464 standard; DNA; 13 BP.
XX
XX AAS15464;
XX
XX 14-FEB-2002 (first entry)
XX
XX PNA 2 inhibiting human and mammalian telomerase activity.
XX
```

XX Mammalian; peptide nucleic acid; probe; forensic; paternity testing;  
KW human telomerase RNA component; hTR gene RFLP pattern; cancer;  
KW inflammation; lymphoproliferative disease; autoimmune disease;  
KW neurodegenerative disease; neoplasia; hyperplasia; HIV; AIDS;  
KW human immunodeficiency virus; acquired immunodeficiency syndrome;  
KW telomere metabolism; mutant; cytostatic; anti-inflammatory;  
KW immunosuppressive; polyamide backbone; ss.  
XX Homo sapiens.  
OS Synthetic.  
XX Key Location/Qualifiers  
FH 1..13  
FT /\*tag= a  
FT /note= "This sequence is a peptide nucleic acid, i.e. it  
FT contains a polyamide backbone instead of a deoxyribose  
FT backbone"  
XX US6294650-B1.  
XX 25-SEP-2001.  
XX 08-JUL-1999; 99US-00349532.  
XX 09-APR-1996; 96US-00630019.  
XX 09-APR-1997; 97US-00838545.  
XX (TEXA ) UNIV TEXAS SYSTEM.  
XX Shay JW, Wright WE, Piatyszek MA, Corey DR, Norton JC;  
XX WPI; 2001-638024/73.  
XX New peptide nucleic acids that hybridizes to the RNA component of  
PT mammalian telomerase, useful for treating or preventing cancer, or  
PT inflammation, lymphoproliferative diseases, autoimmune disease, or  
PT neurodegenerative diseases.  
XX Example 2; Col 37-38; 46pp; English.  
XX The present invention relates to peptide nucleic acids (PNAs), comprising  
CC a sequence of 6-25 nucleobases, that inhibit telomerase activity in  
CC mammalian cells by hybridising to the RNA component of mammalian  
CC telomerase. The PNAs are useful as probes to detect the RNA component of  
CC mammalian telomerase and as inhibitors of telomerase activity, or to  
CC detect and/or quantitate polynucleotide having the human telomerase RNA  
CC component (hTR) sequence, as well as in forensic identification of  
CC individuals, such as paternity testing or identification of criminal  
CC suspects or unknown descendants based on the hTR gene RFLP pattern. The  
CC PNA can be further used for treating or preventing cancer, inflammation,  
CC lymphoproliferative diseases, autoimmune disease, or neurodegenerative  
CC diseases. The PNAs in combination with other pharmaceuticals (such as  
CC antineoplastic or cytostatic agents) can be used for treating neoplasia,  
CC hyperplasia, human immunodeficiency virus (HIV) infections, acquired  
CC immunodeficiency syndrome (AIDS) and associated pathologies, and other  
CC diseases characterised by abnormal telomere metabolism or telomerase  
CC activity. The present sequence represents one of the PNA sequences of the  
XX invention  
XX Sequence 13 BP; 8 A; 1 C; 2 G; 2 T; 0 U; 0 Other;  
SQ

Query Match 2.9%; Score 13; DB 1; Length 13;  
Best Local Similarity 100.0%; Pred. No. 2.8e+02;  
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Qy 38 TTTTGTGCTAAC 50  
| | | | |  
Db 13 TTTTGTGCTAAC 1

RESULT 383  
AAH26730/c

AAH26730 standard; DNA; 13 BP.  
AAH26730;  
26-NOV-2001 (first entry)  
Phosphoramidate-linked 2'-arabino-fluorooligonucleotide.  
2'-arabino-fluorooligonucleotide; phosphoramidate; telomerase; inhibitor;  
infection; cancer; diagnosis; therapy; cytostatic; virucide; antisense;  
antigene; ss.  
Synthetic.  
Key Location/Qualifiers  
FH 2..13  
FT /\*tag= a  
FT /mod\_base= OTHER  
FT /note= "2'-arabino-fluoronucleosides"  
FT modified\_base 2..13  
FT /\*tag= b  
FT /mod\_base= OTHER  
FT /note= "phosphoramidate linkage"  
XX WO200153307-A1.  
XX 26-JUL-2001.  
XX 19-JAN-2001; 2001WO-US001918.  
XX 21-JAN-2000; 2000US-0178248P.  
XX (GERO-) GERON CORP.  
XX Gryaznov S, Schultz RG;  
XX WPI; 2001-589652/66.  
XX Polynucleotides, used to detect and isolate nucleic acids, inhibit  
PT function of RNA and telomerase enzymes and to treat e.g. viral  
PT infections, contain 2'-arabino-fluoronucleoside(s) linked to  
PT nucleoside(s).  
XX Example 6; Page 46; 61pp; English.  
XX The present sequence is that of a N3'-P5', 2'-arabino-fluoro  
CC phosphoramidate oligonucleotide that is complementary to telomerase RNA.  
CC The oligonucleotide was used to assess the relative efficacy of novel 2'-  
CC arabino-fluoro phosphoramidate oligonucleotides and their 2'-ribo  
CC fluorooligonucleotide counterparts (see AAH26728-35) for the inhibition  
CC of telomerase activity. Novel phosphoramidate 2'-arabino-  
CC fluorooligonucleotides are generally more acid stable, more resistant to  
CC cellular proteases, and also show greater telomerase inhibition activity  
CC than 2'-ribose-fluoro phosphoramidates. They are therefore useful for  
CC treating cancer (claimed) and other diseases in which telomerase activity  
CC is present at abnormal levels, such as hyperproliferative or autoimmune  
CC diseases e.g. psoriasis, rheumatoid arthritis, immune system disorders  
CC requiring immunosuppression, and in the treatment of viral infection  
CC (claimed)  
XX Sequence 13 BP; 5 A; 1 C; 4 G; 3 T; 0 U; 0 Other;  
SQ

Query Match 2.9%; Score 13; DB 1; Length 13;  
Best Local Similarity 100.0%; Pred. No. 2.8e+02;  
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Qy 42 TTGTCTAACCTA 54  
| | | | |  
Db 13 TTGTCTAACCTA 1

RESULT 384  
AAH26734/c

ID	AAH26734	standard; DNA; 13 BP.	ID	AAS15937	standard; DNA; 13 BP.
XX	AC	AAH26734;	XX	AC	AAS15937;
XX	DT	26-NOV-2001 (first entry)	XX	DT	27-FEB-2002 (first entry)
XX	DE	Phosphoramidate-linked 2'-ribose-fluorooligonucleotide.	XX	DE	Human telomerase polynucleotide inhibitor #18.
XX	KW	2'-ribose-fluorooligonucleotide; phosphoramidate; telomerase; inhibitor;	XX	KW	Human; telomerase; hTfR; cytostatic; anti-inflammatory; adenocarcinoma;
KW	KW	infection; cancer; diagnosis; therapy; cytostatic; virucide; antisense;	KW	KW	breast; prostate; colon; mixed cell leukaemia; Hodgkin's disease;
KW	KW	antigene; ss.	KW	KW	fertility; inflammatory condition; tumour; cancer; veterinary;
XX	OS	Synthetic.	XX	XX	immunosuppression; telomerase inhibitor; ss.
XX	PH	Key	XX	OS	Homo sapiens.
FT	FT	Location/Qualifiers	XX	OS	Synthetic.
FT	FT	2'.13	XX	PH	Key
FT	FT	/*tag= a	FT	FT	Location/Qualifiers
FT	FT	/mod_base= OTHER	FT	FT	1.13
FT	FT	/note= "2'-ribose-fluoronucleosides"	FT	FT	/*tag= a
FT	FT	2.13	FT	FT	/mod_base= OTHER
FT	FT	/*tag= b	FT	FT	/note= "N3'-P5' phosphoramidate linkages"
FT	FT	/mod_base= OTHER	XX	XX	WO200174136-A2.
FT	FT	/note= "phosphoramidate linkage"	XX	XX	11-OCT-2001.
XX	PN	WO200153307-A1.	XX	XX	30-MAR-2001; 2001WO-US010476.
XX	XX	26-JUL-2001.	XX	XX	31-MAR-2000; 2000US-00540119.
XX	XX	19-JAN-2001; 2001WO-US001918.	XX	XX	(GERO-) GERON CORP.
XX	XX	21-JAN-2000; 2000US-0178248P.	XX	XX	Gryaznov SM, Pruzan R, Weinrich SL;
XX	PA	(GERO-) GERON CORP.	XX	PI	WPI; 2001-656955/75.
XX	PI	Gryaznov S, Schultz RG;	XX	XX	New polynucleotide useful for inhibiting telomerase activity in cells, or
XX	XX	WPI; 2001-589652/66.	XX	XX	for treating telomerase-mediated condition or disease, such as cancers,
XX	XX	Polynucleotides, used to detect and isolate nucleic acids, inhibit	XX	XX	tumors, Hodgkin's disease, or inflammatory conditions.
XX	XX	function of RNA and telomerase enzymes and to treat e.g. viral	XX	XX	Example 3; Page 32; 48pp; English.
XX	XX	infections, contain 2'-arabino-fluoronucleoside(s) linked to	XX	XX	The invention relates to polynucleotide inhibitors (I) and methods for
XX	XX	nucleoside(s).	XX	XX	inhibiting telomerase activity. (I) are useful in inhibiting telomerase
XX	XX	Example 6; Page 46; 61pp; English.	XX	XX	activity and proliferation of a telomerase positive cell, and in
XX	XX	The present sequence is that of a 2'-ribose-fluoro phosphoramidate	XX	XX	manufacturing a medicament for inhibiting telomerase activity in a cell
XX	XX	oligonucleotide that is complementary to telomerase RNA. The	XX	XX	and in treating telomerase-mediated condition or disease, such as
XX	XX	oligonucleotide was used to assess the relative efficacy of novel 2'-	XX	XX	adenocarcinoma of breast, prostate or colon, mixed cell leukaemia,
XX	XX	arabino-fluoro phosphoramidate oligonucleotides and their 2'-ribose	XX	XX	Hodgkin's disease, fertility and inflammatory conditions. (I) are also
XX	XX	fluorooligonucleotide counterparts (see AAH26728-35) for the inhibition	XX	XX	useful in treating a tumour or in manufacturing a medicament for the
XX	XX	of telomerase activity. Novel phosphoramidate 2'-arabino-	XX	XX	treatment of tumour. The polynucleotide inhibitors may also be used in
XX	XX	fluorooligonucleotides are generally more acid stable, more resistant to	XX	XX	diagnostic assays for detecting RNA or DNA. Inhibition of telomerase
XX	XX	cellular proteases, and also show greater telomerase inhibition activity	XX	XX	activity in cells in vivo is useful in prophylactic and therapeutic
XX	XX	than 2'-ribose-fluoro phosphoramidates. They are therefore useful for	XX	XX	methods of treating cancer and other disorders involving inappropriate
XX	XX	treating cancer (claimed) and other diseases in which telomerase activity	XX	XX	expression of telomerase, and in treating veterinary proliferative
XX	XX	is present at abnormal levels, such as hyperproliferative or autoimmune	XX	XX	diseases. Inhibition of telomerase in haematopoietic stem cells is useful
XX	XX	diseases e.g. psoriasis, rheumatoid arthritis, immune system disorders	XX	XX	for immunosuppression and for selectively down-regulating specific
XX	XX	requiring immunosuppression, and in the treatment of viral infection	XX	XX	branches of the immune system. The present sequence represents human
XX	XX	(claimed)	XX	XX	telomerase polynucleotide inhibitor #18, as described in the method of
XX	XX	Sequence 13 BP; 5 A; 1 C; 4 G; 3 T; 0 U; 0 Other;	XX	XX	the invention
SQ	SQ	Query Match 2.9%; Score 13; DB 1; Length 13;	SQ	SQ	Sequence 13 BP; 0 A; 1 C; 2 G; 10 T; 0 U; 0 Other;
		Best Local Similarity 100.0%; Pred. No. 2.8e+02;			Query Match 2.9%; Score 13; DB 1; Length 13;
		Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;			Best Local Similarity 100.0%; Pred. No. 2.8e+02;
					Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY	42	TTGTCTAACCCCTA 54	QY	164	AGCAACACAAAAA 176
Db	13	TTGTCTAACCCCTA 1	Db	13	AGCAACACAAAAA 1
RESULT 385					
AAS15937/c					
RESULT 386					

```

AAS15921/C
ID AAS15921 standard; DNA; 13 BP.
XX
AC AAS15921;
XX
DT 27-FEB-2002 (first entry)
XX
DE Human telomerase polynucleotide inhibitor #2.
XX
KW Human; telomerase; hTR; cytostatic; anti-inflammatory; adenocarcinoma;
KW breast; prostate; colon; mixed cell leukaemia; Hodgkin's disease;
KW fertility; inflammatory condition; tumour; cancer; veterinary;
KW immunosuppression; telomerase inhibitor; ss.
XX
OS Homo sapiens.
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 1..13
FT /*tag= a
FT /mod_base= OTHER
FT /note= "N3'-PS' phosphoramidate linkages"
XX
PN WO200174136-A2.
XX
PD 11-OCT-2001.
XX
PF 30-MAR-2001; 2001WO-US010476.
XX
PR 31-MAR-2000; 2000US-00540119.
XX
PA (GERO-) GERON CORP.
XX
PI Gryaznov SM, Pruzan R, Weinrich SL;
XX WPI; 2001-656955/75.
XX
PT New polynucleotide useful for inhibiting telomerase activity in cells, or
PT for treating telomerase-mediated condition or disease, such as cancers,
PT tumors, Hodgkin's disease, or inflammatory conditions.
XX
PS Claim 8; Page 36; 48pp; English.
XX
CC The invention relates to polynucleotide inhibitors (I) and methods for
CC inhibiting telomerase activity. (I) are useful in inhibiting telomerase
CC activity and proliferation of a telomerase positive cell, and in
CC manufacturing a medicament for inhibiting telomerase activity in a cell
CC and in treating telomerase-mediated condition or disease, such as
CC adenocarcinoma of breast, prostate or colon, mixed cell leukaemia,
CC Hodgkin's disease, fertility and inflammatory conditions. (I) are also
CC useful in treating a tumour or in manufacturing a medicament for the
CC treatment of tumour. The polynucleotide inhibitors may also be used in
CC diagnostic assays for detecting RNA or DNA. Inhibition of telomerase
CC activity in cells in vivo is useful in prophylactic and therapeutic
CC methods of treating cancer and other disorders involving inappropriate
CC expression of telomerase, and in treating veterinary proliferative
CC diseases. Inhibition of telomerase in haematopoietic stem cells is useful
CC for immunosuppression and for selectively down-regulating specific
CC branches of the immune system. The present sequence represents human
CC telomerase polynucleotide inhibitor #2, as described in the method of the
CC invention
XX
SQ Sequence 13 BP; 4 A; 2 C; 6 G; 1 T; 0 U; 0 Other;

Query Match 2.9%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 2.8e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 143 GCCTTCACCGTT 155
Db 13 GCCTTCACCGTT 1

AAS15926/C
ID AAS15926 standard; DNA; 13 BP.
XX
AC AAS15926;
XX
DT 27-FEB-2002 (first entry)
XX
DE Human telomerase polynucleotide inhibitor #7.
XX
KW Human; telomerase; hTR; cytostatic; anti-inflammatory; adenocarcinoma;
KW breast; prostate; colon; mixed cell leukaemia; Hodgkin's disease;
KW fertility; inflammatory condition; tumour; cancer; veterinary;
KW immunosuppression; telomerase inhibitor; ss.
XX
OS Homo sapiens.
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 1..13
FT /*tag= a
FT /mod_base= OTHER
FT /note= "N3'-PS' phosphoramidate linkages"
XX
PN WO200174136-A2.
XX
PD 11-OCT-2001.
XX
PF 30-MAR-2001; 2001WO-US010476.
XX
PR 31-MAR-2000; 2000US-00540119.
XX
PA (GERO-) GERON CORP.
XX
PI Gryaznov SM, Pruzan R, Weinrich SL;
XX WPI; 2001-656955/75.
XX
PT New polynucleotide useful for inhibiting telomerase activity in cells, or
PT for treating telomerase-mediated condition or disease, such as cancers,
PT tumors, Hodgkin's disease, or inflammatory conditions.
XX
PS Claim 8; Page 36; 48pp; English.
XX
CC The invention relates to polynucleotide inhibitors (I) and methods for
CC inhibiting telomerase activity. (I) are useful in inhibiting telomerase
CC activity and proliferation of a telomerase positive cell, and in
CC manufacturing a medicament for inhibiting telomerase activity in a cell
CC and in treating telomerase-mediated condition or disease, such as
CC adenocarcinoma of breast, prostate or colon, mixed cell leukaemia,
CC Hodgkin's disease, fertility and inflammatory conditions. (I) are also
CC useful in treating a tumour or in manufacturing a medicament for the
CC treatment of tumour. The polynucleotide inhibitors may also be used in
CC diagnostic assays for detecting RNA or DNA. Inhibition of telomerase
CC activity in cells in vivo is useful in prophylactic and therapeutic
CC methods of treating cancer and other disorders involving inappropriate
CC expression of telomerase, and in treating veterinary proliferative
CC diseases. Inhibition of telomerase in haematopoietic stem cells is useful
CC for immunosuppression and for selectively down-regulating specific
CC branches of the immune system. The present sequence represents human
CC telomerase polynucleotide inhibitor #7, as described in the method of the
CC invention
XX
SQ Sequence 13 BP; 3 A; 2 C; 8 G; 0 T; 0 U; 0 Other;

Query Match 2.9%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 2.8e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 137 CCTGCCCGCTTCC 149
Db 13 CCTGCCCGCTTCC 1

```

RESULT 388	RESULT 389
AAS15930/c	AAS15935/c
ID AAS15930 standard; DNA; 13 BP.	ID AAS15935 standard; DNA; 13 BP.
AC AAS15930;	AC AAS15935;
XX	XX
DT 27-FEB-2002 (first entry)	DT 27-FEB-2002 (first entry)
DE Human telomerase polynucleotide inhibitor #11.	DE Human telomerase polynucleotide inhibitor #16.
XX	XX
KW Human; telomerase; hTR; cytostatic; anti-inflammatory; adenocarcinoma;	KW Human; telomerase; hTR; cytostatic; anti-inflammatory; adenocarcinoma;
KW breast; prostate; colon; mixed cell leukaemia; Hodgkin's disease;	KW breast; prostate; colon; mixed cell leukaemia; Hodgkin's disease;
KW fertility; inflammatory condition; tumour; cancer; veterinary;	KW fertility; inflammatory condition; tumour; cancer; veterinary;
KW immunosuppression; telomerase inhibitor; ss.	KW immunosuppression; telomerase inhibitor; ss.
XX	XX
OS Homo sapiens.	OS Homo sapiens.
OS Synthetic.	OS Synthetic.
XX	XX
FH Key Location/Qualifiers	FH Key Location/Qualifiers
FT modified_base 1..13	FT modified_base 1..13
FT /*tag= a	FT /*tag= a
FT /mod_base= OTHER	FT /mod_base= OTHER
FT /note= "N3'-P5' phosphoramidate linkages"	FT /note= "N3'-P5' phosphoramidate linkages"
XX	XX
PN WO200174136-A2.	PN WO200174136-A2.
XX	XX
PD 11-OCT-2001.	PD 11-OCT-2001.
XX	XX
PF 30-MAR-2001; 2001WO-US010476.	PF 30-MAR-2001; 2001WO-US010476.
XX	XX
PR 31-MAR-2000; 2000US-00540119.	PR 31-MAR-2000; 2000US-00540119.
XX	XX
PA (GERO-) GERON CORP.	PA (GERO-) GERON CORP.
XX	XX
PI Gryaznov SM, Pruzan R, Weinrich SL;	PI Gryaznov SM, Pruzan R, Weinrich SL;
XX	XX
DR WPI; 2001-656955/75.	DR WPI; 2001-656955/75.
XX	XX
PT New polynucleotide useful for inhibiting telomerase activity in cells, or	PT New polynucleotide useful for inhibiting telomerase activity in cells, or
PT for treating telomerase-mediated condition or disease, such as cancers,	PT for treating telomerase-mediated condition or disease, such as cancers,
PT tumors, Hodgkin's disease, or inflammatory conditions.	PT tumors, Hodgkin's disease, or inflammatory conditions.
XX	XX
PS Example 3; Page 32; 48pp; English.	PS Claim 8; Page 36; 48pp; English.
XX	XX
CC The invention relates to polynucleotide inhibitors (I) and methods for	CC The invention relates to polynucleotide inhibitors (I) and methods for
CC inhibiting telomerase activity. (I) are useful in inhibiting telomerase	CC inhibiting telomerase activity. (I) are useful in inhibiting telomerase
CC activity and proliferation of a telomerase positive cell, and in	CC activity and proliferation of a telomerase positive cell, and in
CC manufacturing a medicament for inhibiting telomerase activity in a cell	CC manufacturing a medicament for inhibiting telomerase activity in a cell
CC and in treating telomerase-mediated condition or disease, such as	CC and in treating telomerase-mediated condition or disease, such as
CC adenocarcinoma of breast, prostate or colon, mixed cell leukaemia,	CC adenocarcinoma of breast, prostate or colon, mixed cell leukaemia,
CC Hodgkin's disease, fertility and inflammatory conditions. (I) are also	CC Hodgkin's disease, fertility and inflammatory conditions. (I) are also
CC useful in treating a tumour or in manufacturing a medicament for the	CC useful in treating a tumour or in manufacturing a medicament for the
CC treatment of tumour. The polynucleotide inhibitors may also be used in	CC treatment of tumour. The polynucleotide inhibitors may also be used in
CC diagnostic assays for detecting RNA or DNA. Inhibition of telomerase	CC diagnostic assays for detecting RNA or DNA. Inhibition of telomerase
CC activity in cells in vivo is useful in prophylactic and therapeutic	CC activity in cells in vivo is useful in prophylactic and therapeutic
CC methods of treating cancer and other disorders involving inappropriate	CC methods of treating cancer and other disorders involving inappropriate
CC expression of telomerase, and in treating veterinary proliferative	CC expression of telomerase, and in treating veterinary proliferative
CC diseases. Inhibition of telomerase in haematopoietic stem cells is useful	CC expression of telomerase, and in treating veterinary proliferative
CC for immunosuppression and for selectively down-regulating specific	CC diseases. Inhibition of telomerase in haematopoietic stem cells is useful
CC branches of the immune system. The present sequence represents human	CC for immunosuppression and for selectively down-regulating specific
CC telomerase polynucleotide inhibitor #11, as described in the method of	CC branches of the immune system. The present sequence represents human
CC the invention	CC telomerase polynucleotide inhibitor #16, as described in the method of
XX	XX
SQ Sequence 13 BP; 5 A; 2 C; 3 G; 3 T; 0 U; 0 Other;	SQ Sequence 13 BP; 2 A; 1 C; 1 G; 9 T; 0 U; 0 Other;
Query Match 2.9%; Score 13; DB 1; Length 13;	Query Match 2.9%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 2.8e+02;	Best Local Similarity 100.0%; Pred. No. 2.8e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;	Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 154 TTCATTCCTAGGC 166	QY 167 AACACAAAATGT 179
DB 13 TTCATTCCTAGGC 1	

```

Db      13  AAACAAAAATGT 1
RESULT 390
AAS15922/c
ID      AAS15922 standard; DNA; 13 BP.
XX
AC      AAS15922;
XX
DT      27-FEB-2002 (first entry)
XX
DE      Human telomerase polynucleotide inhibitor #3.
XX
KW      Human; telomerase; hTR; cytostatic; anti-inflammatory; adenocarcinoma;
KW      breast; prostate; colon; mixed cell leukaemia; Hodgkin's disease;
KW      fertility; inflammatory condition; tumour; cancer; veterinary;
KW      immunosuppression; telomerase inhibitor; ss.
XX
OS      Homo sapiens.
OS      Synthetic.
XX
FH      Key      Location/Qualifiers
FT      modified_base 1..13
FT      /*tag= a
FT      /mod_base= OTHER
FT      /note= "N3'-P5' phosphoramidate linkages"
XX
PN      WO200174136-A2.
XX
PD      11-OCT-2001.
XX
PF      30-MAR-2001; 2001WO-US010476.
XX
PR      31-MAR-2000; 2000US-00540119.
XX
PA      (GERO-) GERON CORP.
XX
PI      Gryaznov SM, Pruzan R, Weinrich SL;
XX      WPI; 2001-656955/75.
XX
PT      New polynucleotide useful for inhibiting telomerase activity in cells, or
PT      for treating telomerase-mediated condition or disease, such as cancers,
PT      tumors, Hodgkin's disease, or inflammatory conditions.
XX
PS      Claim 8; Page 36; 48pp; English.
XX
CC      The invention relates to polynucleotide inhibitors (I) and methods for
CC      inhibiting telomerase activity. (I) are useful in inhibiting telomerase
CC      activity and proliferation of a telomerase positive cell, and in
CC      manufacturing a medicament for inhibiting telomerase activity in a cell
CC      and in treating telomerase-mediated condition or disease, such as
CC      adenocarcinoma of breast, prostate or colon, mixed cell leukaemia,
CC      Hodgkin's disease, fertility and inflammatory conditions. (I) are also
CC      useful in treating a tumour or in manufacturing a medicament for the
CC      treatment of tumour. The polynucleotide inhibitors may also be used in
CC      diagnostic assays for detecting RNA or DNA. Inhibition of telomerase
CC      activity in cells in vivo is useful in prophylactic and therapeutic
CC      methods of treating cancer and other disorders involving inappropriate
CC      expression of telomerase, and in treating veterinary proliferative
CC      diseases. Inhibition of telomerase in haematopoietic stem cells is useful
CC      for immunosuppression and for selectively down-regulating specific
CC      branches of the immune system. The present sequence represents human
CC      telomerase polynucleotide inhibitor #3, as described in the method of the
CC      invention
XX
SQ      Sequence 13 BP; 3 A; 2 C; 7 G; 1 T; 0 U; 0 Other;
      Query Match      2.9%; Score 13; DB 1; Length 13;
      Best Local Similarity 100.0%; Pred. No. 2.8e+02;
      Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Oy      142 CGCCTTCCACCGT 154

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Db      13  CGCCTTCCACCGT 1
RESULT 391
AAS15923/c
ID      AAS15923 standard; DNA; 13 BP.
XX
AC      AAS15923;
XX
DT      27-FEB-2002 (first entry)
XX
DE      Human telomerase polynucleotide inhibitor #4.
XX
KW      Human; telomerase; hTR; cytostatic; anti-inflammatory; adenocarcinoma;
KW      breast; prostate; colon; mixed cell leukaemia; Hodgkin's disease;
KW      fertility; inflammatory condition; tumour; cancer; veterinary;
KW      immunosuppression; telomerase inhibitor; ss.
XX
OS      Homo sapiens.
OS      Synthetic.
XX
FH      Key      Location/Qualifiers
FT      modified_base 1..13
FT      /*tag= a
FT      /mod_base= OTHER
FT      /note= "N3'-P5' phosphoramidate linkages"
XX
PN      WO200174136-A2.
XX
PD      11-OCT-2001.
XX
PF      30-MAR-2001; 2001WO-US010476.
XX
PR      31-MAR-2000; 2000US-00540119.
XX
PA      (GERO-) GERON CORP.
XX
PI      Gryaznov SM, Pruzan R, Weinrich SL;
XX      WPI; 2001-656955/75.
XX
PT      New polynucleotide useful for inhibiting telomerase activity in cells, or
PT      for treating telomerase-mediated condition or disease, such as cancers,
PT      tumors, Hodgkin's disease, or inflammatory conditions.
XX
PS      Claim 8; Page 36; 48pp; English.
XX
CC      The invention relates to polynucleotide inhibitors (I) and methods for
CC      inhibiting telomerase activity. (I) are useful in inhibiting telomerase
CC      activity and proliferation of a telomerase positive cell, and in
CC      manufacturing a medicament for inhibiting telomerase activity in a cell
CC      and in treating telomerase-mediated condition or disease, such as
CC      adenocarcinoma of breast, prostate or colon, mixed cell leukaemia,
CC      Hodgkin's disease, fertility and inflammatory conditions. (I) are also
CC      useful in treating a tumour or in manufacturing a medicament for the
CC      treatment of tumour. The polynucleotide inhibitors may also be used in
CC      diagnostic assays for detecting RNA or DNA. Inhibition of telomerase
CC      activity in cells in vivo is useful in prophylactic and therapeutic
CC      methods of treating cancer and other disorders involving inappropriate
CC      expression of telomerase, and in treating veterinary proliferative
CC      diseases. Inhibition of telomerase in haematopoietic stem cells is useful
CC      for immunosuppression and for selectively down-regulating specific
CC      branches of the immune system. The present sequence represents human
CC      telomerase polynucleotide inhibitor #4, as described in the method of the
CC      invention
XX
SQ      Sequence 13 BP; 2 A; 2 C; 8 G; 1 T; 0 U; 0 Other;
      Query Match      2.9%; Score 13; DB 1; Length 13;
      Best Local Similarity 100.0%; Pred. No. 2.8e+02;
      Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

QY 141 CCGCCTTCACCG 153  
| | | | | | | | | |  
Db 13 CCGCCTTCACCG 1

RESULT 392  
AAS15925/C  
ID AAS15925 standard; DNA; 13 BP.  
XX  
AC AAS15925;  
XX

DT 27-FEB-2002 (first entry)  
XX

DE Human telomerase polynucleotide inhibitor #6.  
XX

KW Human; telomerase; hTR; cytostatic; anti-inflammatory; adenocarcinoma;  
KW breast; prostate; colon; mixed cell leukaemia; Hodgkin's disease;  
KW fertility; inflammatory condition; tumour; cancer; veterinary;  
KW immunosuppression; telomerase inhibitor; ss.  
XX

OS Homo sapiens.  
OS Synthetic.  
XX

Key Location/Qualifiers  
FH modified\_base 1. .13  
FT /\*tag= a  
FT /mod\_base= OTHER  
FT /note= "N3'-P5' phosphoramidate linkages"  
XX

PN WO200174136-A2.  
XX

XX 11-OCT-2001.  
XX

XX 30-MAR-2001; 2001WO-US010476.  
XX

XX 31-MAR-2000; 2000US-00540119.  
XX

PA (GERO-) GERON CORP.  
XX

PI Gryaznov SM, Pruzan R, Weinrich SL;  
XX

DR WPI; 2001-656955/75.  
XX

XX New polynucleotide useful for inhibiting telomerase activity in cells, or  
PT for treating telomerase-mediated condition or disease, such as cancers,  
PT tumors, Hodgkin's disease, or inflammatory conditions.  
XX  
PS Claim 8; Page 36; 48pp; English.

CC The invention relates to polynucleotide inhibitors (I) and methods for  
CC inhibiting telomerase activity. (I) are useful in inhibiting telomerase  
CC activity and proliferation of a telomerase positive cell, and in  
CC manufacturing a medicament for inhibiting telomerase activity in a cell  
CC and in treating telomerase-mediated condition or disease, such as  
CC adenocarcinoma of breast, prostate or colon, mixed cell leukaemia,  
CC Hodgkin's disease, fertility and inflammatory conditions. (I) are also  
CC useful in treating a tumour or in manufacturing a medicament for the  
CC treatment of tumour. The polynucleotide inhibitors may also be used in  
CC diagnostic assays for detecting RNA or DNA. Inhibition of telomerase  
CC activity in cells in vivo is useful in prophylactic and therapeutic  
CC methods of treating cancer and other disorders involving inappropriate  
CC expression of telomerase, and in treating veterinary proliferative  
CC diseases. Inhibition of telomerase in haematopoietic stem cells is useful  
CC for immunosuppression and for selectively down-regulating specific  
CC branches of the immune system. The present sequence represents human  
CC telomerase polynucleotide inhibitor #6, as described in the method of the  
CC invention  
XX

SQ Sequence 13 BP; 3 A; 2 C; 7 G; 1 T; 0 U; 0 Other;  
XX

Query Match 2.9%; Score 13; DB 1; Length 13;  
Best Local Similarity 100.0%; Pred. No. 2.8e+02;  
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 138 CTGCGCCTTCCA 150  
| | | | | | | | | |  
Db 13 CTGCGCCTTCCA 1

RESULT 393  
AAS15924/C  
ID AAS15924 standard; DNA; 13 BP.  
XX  
AC AAS15924;  
XX

DT 27-FEB-2002 (first entry)  
XX

DE Human telomerase polynucleotide inhibitor #5.  
XX

KW Human; telomerase; hTR; cytostatic; anti-inflammatory; adenocarcinoma;  
KW breast; prostate; colon; mixed cell leukaemia; Hodgkin's disease;  
KW fertility; inflammatory condition; tumour; cancer; veterinary;  
KW immunosuppression; telomerase inhibitor; ss.  
XX

OS Homo sapiens.  
OS Synthetic.  
XX

Key Location/Qualifiers  
FH modified\_base 1. .13  
FT /\*tag= a  
FT /mod\_base= OTHER  
FT /note= "N3'-P5' phosphoramidate linkages"  
XX

PN WO200174136-A2.  
XX

XX 11-OCT-2001.  
XX

XX 30-MAR-2001; 2001WO-US010476.  
XX

XX 31-MAR-2000; 2000US-00540119.  
XX

PA (GERO-) GERON CORP.  
XX

PI Gryaznov SM, Pruzan R, Weinrich SL;  
XX

DR WPI; 2001-656955/75.  
XX

XX New polynucleotide useful for inhibiting telomerase activity in cells, or  
PT for treating telomerase-mediated condition or disease, such as cancers,  
PT tumors, Hodgkin's disease, or inflammatory conditions.  
XX  
PS Claim 8; Page 36; 48pp; English.

CC The invention relates to polynucleotide inhibitors (I) and methods for  
CC inhibiting telomerase activity. (I) are useful in inhibiting telomerase  
CC activity and proliferation of a telomerase positive cell, and in  
CC manufacturing a medicament for inhibiting telomerase activity in a cell  
CC and in treating telomerase-mediated condition or disease, such as  
CC adenocarcinoma of breast, prostate or colon, mixed cell leukaemia,  
CC Hodgkin's disease, fertility and inflammatory conditions. (I) are also  
CC useful in treating a tumour or in manufacturing a medicament for the  
CC treatment of tumour. The polynucleotide inhibitors may also be used in  
CC diagnostic assays for detecting RNA or DNA. Inhibition of telomerase  
CC activity in cells in vivo is useful in prophylactic and therapeutic  
CC methods of treating cancer and other disorders involving inappropriate  
CC expression of telomerase, and in treating veterinary proliferative  
CC diseases. Inhibition of telomerase in haematopoietic stem cells is useful  
CC for immunosuppression and for selectively down-regulating specific  
CC branches of the immune system. The present sequence represents human  
CC telomerase polynucleotide inhibitor #5, as described in the method of the  
CC invention  
XX

SQ Sequence 13 BP; 3 A; 2 C; 7 G; 1 T; 0 U; 0 Other;  
XX

Query Match 2.9%; Score 13; DB 1; Length 13;  
Best Local Similarity 100.0%; Pred. No. 2.8e+02;



Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 139 TGCCGCTTCCAC 151  
| | | | | | | | | |  
Db 13 TGCCGCTTCCAC 1

RESULT 394  
AAS15938/C  
ID AAS15938 standard; DNA; 13 BP.  
XX AC AAS15938;  
XX DT 27-FEB-2002 (first entry)  
XX DE Human telomerase polynucleotide inhibitor #19.  
XX KW Human; telomerase; hTR; cytostatic; anti-inflammatory; adenocarcinoma;  
KW breast; prostate; colon; mixed cell leukaemia; Hodgkin's disease;  
KW fertility; inflammatory condition; tumour; cancer; veterinary;  
KW immunosuppression; telomerase inhibitor; ss.  
XX OS Homo sapiens.  
XX OS Synthetic.  
XX FH Key Location/Qualifiers  
FT modified\_base 1..13  
FT /\*tag= a  
FT /mod\_base= OTHER  
FT /note= "N3'-P5' phosphoramidate linkages"  
XX WO200174136-A2.  
XX PN 11-OCT-2001.  
XX PD 30-MAR-2001; 2001WO-US010476.  
XX PF 31-MAR-2000; 2000US-00540119.  
XX PR (GERO-) GERON CORP.  
XX PA Gryaznov SM, Pruzan R, Weinrich SL;  
XX PI WPI; 2001-656955/75.  
XX DR New polynucleotide useful for inhibiting telomerase activity in cells, or  
XX PT for treating telomerase-mediated condition or disease, such as cancers,  
XX PT tumors, Hodgkin's disease, or inflammatory conditions.  
XX PS Example 3; Page 32; 48pp; English.  
XX CC The invention relates to polynucleotide inhibitors (I) and methods for  
XX CC inhibiting telomerase activity. (I) are useful in inhibiting telomerase  
XX CC activity and proliferation of a telomerase positive cell, and in  
XX CC manufacturing a medicament for inhibiting telomerase activity in a cell  
XX CC and in treating telomerase-mediated condition or disease, such as  
XX CC adenocarcinoma of breast, prostate or colon, mixed cell leukaemia,  
XX CC Hodgkin's disease, fertility and inflammatory conditions. (I) are also  
XX CC useful in treating a tumour or in manufacturing a medicament for the  
XX CC treatment of tumour. The polynucleotide inhibitors may also be used in  
XX CC diagnostic assays for detecting RNA or DNA. Inhibition of telomerase  
XX CC activity in cells in vivo is useful in prophylactic and therapeutic  
XX CC methods of treating cancer and other disorders involving inappropriate  
XX CC expression of telomerase, and in treating veterinary proliferative  
XX CC diseases. Inhibition of telomerase in haematopoietic stem cells is useful  
XX CC for immunosuppression and for selectively down-regulating specific  
XX CC branches of the immune system. The present sequence represents human  
XX CC telomerase polynucleotide inhibitor #19, as described in the method of  
XX CC the invention  
XX SQ Sequence 13 BP; 1 A; 2 C; 2 G; 8 T; 0 U; 0 Other;

Query Match 2.9%; Score 13; DB 1; Length 13;

Best Local Similarity 100.0%; Pred. No. 2.8e+02;  
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 161 TAGAGCAACAAA 173  
| | | | | | | | | |  
Db 13 TAGAGCAACAAA 1

RESULT 395  
AAF81193/C  
ID AAF81193 standard; DNA; 13 BP.  
XX AC AAF81193;  
XX DT 30-MAY-2001 (first entry)  
XX DE Thiophosphoramidate oligonucleotide, SEQ ID NO: 2.  
XX KW Thiophosphoramidate oligonucleotide; virucide; cytostatic;  
KW immunosuppressive; contraceptive; RNA inhibitor; telomerase inhibitor;  
KW antisense therapy; viral infection; cancer; hyperproliferative disorder;  
KW autoimmune disorder; ss.  
XX OS Synthetic.  
XX OS WO200118015-A1.  
XX PN 15-MAR-2001.  
XX PD 08-SEP-2000; 2000WO-US024688.  
XX PF 10-SEP-1999; 99US-0153201P.  
XX PR 19-OCT-1999; 99US-0160444P.  
XX PA (GERO-) GERON CORP.  
XX PI Gryaznov S, Pongracz K, Matray T;  
XX DR WPI; 2001-265967/27.  
XX DR Novel thiophosphoramidate polynucleotide useful for detection of RNA or  
XX PT DNA having a given target sequence, for inhibiting RNA function in a  
XX PT cell, and for treating cancer and viral infection.  
XX PS Example 3; Page 46; 68pp; English.  
XX CC The present sequence was synthesised in an example illustrating an  
XX CC invention relating to polynucleotides comprising a non-homopolymERIC  
XX CC sequence of nucleoside subunits joined by at least one inter-subunit  
XX CC linkage that is a N3'-P5' thiophosphoramidate. The thiophosphoramidate  
XX CC oligonucleotides retain a high RNA binding affinity and exhibit a much  
XX CC higher acid stability. They are useful for detecting a specific sequence  
XX CC in a sample, by forming a hybridisation complex with the sequence. They  
XX CC are useful for inhibiting function of an RNA in a cell (for inhibiting  
XX CC translation of a mRNA or for inhibiting telomerase enzyme in a cell).  
XX CC They are also useful in the preparation of a medicament for treatment of  
XX CC viral infection or cancer. The oligonucleotides are useful for anti-sense  
XX CC and anti-gene diagnostic or therapeutic applications and may be used for  
XX CC treating telomerase-mediated conditions or diseases, such as  
XX CC hyperproliferative and autoimmune disorders, and for contraceptive  
XX CC purposes  
XX SQ Sequence 13 BP; 5 A; 1 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 2.9%; Score 13; DB 1; Length 13;  
Best Local Similarity 100.0%; Pred. No. 2.8e+02;  
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 42 TTGTCTAACCCCTA 54  
| | | | | | | | | |  
Db 13 TTGTCTAACCCCTA 1

```
RESULT 396
AAF81195/c
ID AAF81195 standard; DNA; 13 BP.
XX
XX
AC AAF81195;
XX
XX 30-MAY-2001 (first entry)
XX
XX Thiophosphoramidate oligonucleotide, SEQ ID NO: 10.
XX
XX Thiophosphoramidate oligonucleotide; virucide; cytostatic;
KW immunosuppressive; contraceptive; RNA inhibitor; telomerase inhibitor;
KW antisense therapy; viral infection; cancer; hyperproliferative disorder;
KW autoimmune disorder; ss.
XX
XX Synthetic.
OS
XX WO200118015-A1.
PN
XX 15-MAR-2001.
XX
XX 08-SEP-2000; 2000WO-US024688.
XX
XX 10-SEP-1999; 99US-0153201P.
PR
XX 19-OCT-1999; 99US-0160444P.
XX
XX (GERO-) GERON CORP.
PA
XX Gryaznov S, Pongracz K, Matray T;
PI
XX WPI; 2001-265967/27.
DR
XX
XX Novel thiophosphoramidate polynucleotide useful for detection of RNA or
PT DNA having a given target sequence, for inhibiting RNA function in a
PT cell, and for treating cancer and viral infection.
XX
XX Example 7; Page 47; 69pp; English.
XX
XX The present sequence was synthesised in an example illustrating an
CC invention relating to polynucleotides comprising a non-homopolymERIC
CC sequence of nucleoside subunits joined by at least one inter-subunit
CC linkage that is a 3'-ps' thiophosphoramidate. The thiophosphoramidate
CC oligonucleotides retain a high RNA binding affinity and exhibit a much
CC higher acid stability. They are useful for detecting a specific sequence
CC in a sample, by forming a hybridisation complex with the sequence. They
CC are useful for inhibiting function of an RNA in a cell (for inhibiting
CC translation of a mRNA or for inhibiting telomerase enzyme in a cell).
CC They are also useful in the preparation of a medicament for treatment of
CC viral infection or cancer. The oligonucleotides are useful for anti-sense
CC and anti-gene diagnostic or therapeutic applications and may be used for
CC treating telomerase-mediated conditions or diseases, such as
CC hyperproliferative and autoimmune disorders, and for contraceptive
CC purposes
XX
XX Sequence 13 BP; 3 A; 1 C; 5 G; 4 T; 0 U; 0 Other;
SQ
Query Match 2.9%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 2.8e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 46 CTAACCCCTAACTG 58
Db 13 CTAACCCCTAACTG 1

RESULT 397
AAD50105/c
ID AAD50105 standard; DNA; 13 BP.
XX
XX AAD50105;
AC
XX 24-MAR-2003 (first entry)
DT
XX

Oligonucleotide #1 used in conjugates of the invention.
Medicine; telomerase; tumour; cancer; leukaemia; lymphoma; ss.
Unidentified.
WO200277184-A2.
03-OCT-2002.
21-MAR-2002; 2002WO-US009138.
23-MAR-2001; 2001US-0278322P.
(GERO-) GERON CORP.
Gryaznov S, Pongracz K, Tolman RL, Morin GB;
WPI; 2003-092850/08.
New oligonucleotide conjugate useful in the treatment of e.g. cancers are
telomerase inhibitors.
Claim 12; Page 37; 45pp; English.
The present invention relates to oligonucleotide conjugates where the
oligonucleotide is covalently linked to an aromatic group. Compounds of
the invention are used in medicine for inhibition of telomerase enzyme
activity in cells (preferably expressed by tumour cells such as cells
from cancer of the skin, central nervous system, retina and circulating
tumours (e.g. leukaemia and lymphoma)). The present DNA sequence is an
oligonucleotide used in conjugates of the invention
Sequence 13 BP; 5 A; 1 C; 4 G; 3 T; 0 U; 0 Other;
Query Match 2.9%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 2.8e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 42 TTGTCTAACCCCTA 54
Db 13 TTGTCTAACCCCTA 1

RESULT 398
ADB68045/c
ID ADB68045 standard; RNA; 13 BP.
XX
XX ADB68045;
AC
XX 04-DEC-2003 (first entry)
DT
XX Match phosphorothioate modified 2'-O-methyl RNA G-core oligonucleotide.
DE telomere length; aging; hyperproliferative condition; cancer ; ss;
KW G-core.
XX
XX Unidentified.
OS
XX US2003096776-A1.
PN
XX 22-MAY-2003.
PD
XX 02-JAN-2002; 2002US-00038335.
XX
XX 29-SEP-1992; 92US-00954185.
PR 29-SEP-1993; 93WO-US009297.
PR 12-JUN-1995; 95US-00403888.
PR 23-APR-1999; 99US-00299058.
XX
XX (ISIS-) ISIS PHARM INC.
PA
XX Hanecak RC, Anderson KP, Bennett CF, Chiang M, Brown-Driver VL;
PI
```

PI Ecker DJ, Vickers TA, Wyatt JR;  
XX WPI; 2003-606442/57.  
XX  
XX New chemically modified oligonucleotides, useful for modulating telomere  
XX length of a mammalian chromosome, inhibiting the division of a malignant  
XX mammalian cell, or modulating the effects of aging of a mammalian cell.  
XX  
XX Example 5; Page 6; 10pp; English.  
XX  
XX The invention relates to a novel chemically modified oligonucleotide  
XX having no more than about 27 nucleic acid base units. The oligonucleotide  
XX modulates mammalian telomere length. The chemically modified  
XX oligonucleotide of the invention may be useful for modulating the  
XX telomere length of a mammalian chromosome, inhibiting the division of a  
XX malignant mammalian cell or modulating the effects of aging of a  
XX mammalian cell. The oligonucleotides may also be useful for treating  
XX diseases associated with abnormal telomere length such as aging and  
XX hyperproliferative conditions including cancer. The current sequence is  
XX that of the "match" phosphorothioate modified 2'-O-methyl RNA G-core  
XX oligonucleotide of the invention.  
XX  
SQ Sequence 13 BP; 3 A; 1 C; 5 G; 0 T; 4 U; 0 Other;  
Query Match 2.9%; Score 13; DB 1; Length 13;  
Best Local Similarity 100.0%; Pred. No. 2.8e+02;  
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 46 CTAACCCCTAACTG 58  
DB 13 CTAACCCCTAACTG 1  
RESULT 399  
ADB68046/C  
ID ADB68046 standard; DNA; 13 BP.  
XX  
XX ADB68046;  
XX  
XX 04-DEC-2003 (first entry)  
XX  
XX Match 2'-O-methyl oligonucleotide / peptide nucleic acid.  
XX  
XX telomere length; aging; hyperproliferative condition; cancer; ss; PNA;  
XX peptide nucleic acid.  
XX  
XX Synthetic.  
XX  
XX Key Location/Qualifiers  
FT modified\_base 1..13  
FT /\*tag= b  
FT /mod\_base= OTHER  
FT /note= "OTHER = Optionally phosphorothioate backbone and  
FT 2'-O-methyl sugar modification"  
FT modified\_base 1  
FT /\*tag= a  
FT /mod\_base= OTHER  
FT /note= "OTHER = Optionally linked to Gly residue"  
FT modified\_base 13  
FT /\*tag= c  
FT /mod\_base= m5C, OTHER  
FT /note= "OTHER = Optionally 5-methylcytosine or linked to  
FT Lys residue"  
XX  
XX US2003096776-A1.  
XX  
XX 22-MAY-2003.  
XX  
XX 02-JAN-2002; 2002US-00038335.  
XX  
XX 29-SEP-1992; 92US-00954185.  
XX 29-SEP-1993; 93WO-US009297.  
XX 12-JUN-1995; 95US-00403888.

PR 23-APR-1999; 99US-00299058.  
XX  
XX (ISIS-) ISIS PHARM INC.  
XX  
XX Hanecak RC, Anderson KP, Bennett CF, Chiang M, Brown-Driver VL;  
XX Ecker DJ, Vickers TA, Wyatt JR;  
XX WPI; 2003-606442/57.  
XX  
XX New chemically modified oligonucleotides, useful for modulating telomere  
XX length of a mammalian chromosome, inhibiting the division of a malignant  
XX mammalian cell, or modulating the effects of aging of a mammalian cell.  
XX  
XX Example 5; Page 6; 10pp; English.  
XX  
XX The invention relates to a novel chemically modified oligonucleotide  
XX having no more than about 27 nucleic acid base units. The oligonucleotide  
XX modulates mammalian telomere length. The chemically modified  
XX oligonucleotide of the invention may be useful for modulating the  
XX telomere length of a mammalian chromosome, inhibiting the division of a  
XX malignant mammalian cell or modulating the effects of aging of a  
XX mammalian cell. The oligonucleotides may also be useful for treating  
XX diseases associated with abnormal telomere length such as aging and  
XX hyperproliferative conditions including cancer. The current sequence is  
XX that of the "match" 2'-O-methyl oligonucleotide / peptide nucleic acid of  
XX the invention.  
XX  
SQ Sequence 13 BP; 3 A; 1 C; 5 G; 4 T; 0 U; 0 Other;  
Query Match 2.9%; Score 13; DB 1; Length 13;  
Best Local Similarity 100.0%; Pred. No. 2.8e+02;  
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 46 CTAACCCCTAACTG 58  
DB 13 CTAACCCCTAACTG 1  
RESULT 400  
ABZ58497/C  
ID ABZ58497 standard; RNA; 13 BP.  
XX  
XX ABZ58497;  
XX  
XX 08-MAY-2003 (first entry)  
XX  
XX Telomerase inhibitor VI.  
XX  
XX Telomerase; inhibitor; hair growth; hirsutism; ss.  
XX  
XX Synthetic.  
XX  
XX WO2003002077-A2.  
XX  
XX 09-JAN-2003.  
XX  
XX 12-JUN-2002; 2002WO-US018702.  
XX  
XX 27-JUN-2001; 2001US-00893252.  
XX  
XX (GILL ) GILLETTE CO.  
XX  
XX Styczynski P, Ahluwalia GS;  
XX  
XX WPI; 2003-221439/21.  
XX  
XX Reducing mammalian hair growth comprises applying telomerase inhibitor to  
XX selected skin area.  
XX  
XX Disclosure; Page 4; 13pp; English.  
XX  
XX The present sequence is that of telomerase inhibitor VI, an example a  
XX telomerase inhibitor useful in the method of the invention for reducing

CC unwanted mammalian (human) hair growth. A composition comprising the  
CC telomerase inhibitor is applied to the skin to reduce hair growth. The  
CC telomerase inhibitor acts by reducing telomerase levels in hair  
CC follicles, reducing telomerase mRNA expression or by promoting the  
CC erosion of telomeric DNA. It can be used to reduce hair growth of a woman  
CC with hirsutism or to reduce androgen stimulated hair growth (both  
CC claimed). A composition comprising a telomerase inhibitor reduces hair  
CC growth by at least 15% (preferably 20%) when tested in the Golden Syrian  
CC Hamster assay  
XX  
SQ Sequence 13 BP; 3 A; 1 C; 5 G; 0 T; 4 U; 0 Other;

Query Match 2.9%; Score 13; DB 1; Length 13;  
Best Local Similarity 100.0%; Pred. No. 2.8e+02;  
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 46 CTAACCCCTAACTG 58  
Db 13 CTAACCCCTAACTG 1

RESULT 401  
ADM46660/c  
ID ADM46660 standard; DNA; 13 BP.  
XX  
AC ADM46660;  
XX  
DT 01-JUL-2004 (first entry)  
XX  
DE Telomerase template region complementary oligonucleotide SEQ ID NO:3.  
XX  
KW ss; telomerase; hTR; template region; cytostatic; telomerase inhibition;  
KW cancer; tumour.  
XX  
OS Synthetic.  
XX  
PN WO2004029277-A2.  
XX  
PD 08-APR-2004.  
XX  
PF 23-SEP-2003; 2003WO-US029730.  
XX  
PR 25-SEP-2002; 2002US-00255535.  
XX (GERO-) GERON CORP.  
XX  
PI Gryaznov S, Pongracz K, Tolman RL, Morin GB;  
XX WPI; 2004-329894/30.  
XX

Novel covalent oligonucleotide conjugates comprising nucleobase and  
PT oligonucleotide exactly complementary to sequence within template region  
PT of human telomerase RNA, linked through linker, useful as medicine for  
PT treating cancer.

PS Disclosure: SEQ ID NO 3; 50pp; English.  
XX  
XX The invention relates to a novel compound having telomerase inhibition  
CC activity, comprising a nucleobase (A) and oligonucleotide (O) containing  
CC a sequence of 2-11 nucleotides exactly complementary to a sequence within  
CC the template region of human telomerase RNA, linked through a linker (L).  
CC A compound of the invention has cytostatic activity. The compound is  
CC useful for inhibiting the activity of telomerase enzyme, which involves  
CC contacting the telomerase with the compound. The compound of the  
CC invention is also useful for inhibiting the proliferation of the cell  
CC which involves contacting the cell with the compound. The cell is  
CC preferably a cancer cell. The compound is useful as a medicine for  
CC treating cancer. The compound is useful for inhibiting or reducing  
CC telomerase enzyme activity and/or proliferation of cells having  
CC telomerase activity e.g., tumour cells. The telomerase-positive tumour  
CC cells are from cancer of the skin, connective tissue, adipose, breast,  
CC lung, stomach, pancreas, ovary, cervix, uterus, kidney, bladder, colon,  
CC prostate, central nervous system (CNS), retina and circulating tumours

CC (such as leukaemia and lymphoma). The present sequence represents an  
CC oligonucleotide of the invention.  
XX  
SQ Sequence 13 BP; 5 A; 1 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 2.9%; Score 13; DB 1; Length 13;  
Best Local Similarity 100.0%; Pred. No. 2.8e+02;  
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 42 TTGTCTAACCCCTA 54  
Db 13 TTGTCTAACCCCTA 1

RESULT 402  
ADO21607/c  
ID ADO21607 standard; DNA; 13 BP.  
XX  
AC ADO21607;  
XX  
DT 15-JUL-2004 (first entry)  
XX  
DE Labelled nucleic acid/l1c-related PNA-antisense oligo 2.  
XX  
KW labelled nucleic acid manufacture; l1c; sensitive detection;  
KW PNA-antisense; ss.  
XX  
OS Unidentified.  
XX  
PH Key Location/Qualifiers  
FT modified\_base 1  
FT /\*tag= a  
FT /mod\_base= OTHER  
FT /note= "OTHER = Optionally attached to C3H711CONH group"  
XX  
PN JP2004123542-A.  
XX  
PD 22-APR-2004.  
XX  
PF 30-AUG-2002; 2002JP-00254671.  
XX  
PR 30-AUG-2002; 2002JP-00254671.  
XX  
PA (NIKL ) JAPAN STEEL WORKS LTD.  
XX  
DR WPI; 2004-368480/35.  
XX  
PT Manufacturing labeled nucleic acid, by introducing carbon-11 to  
PT transduction region, and contacting nucleic acid fragment and carbon-11  
PT compound.  
XX  
PS Example 2; Fig 7; 17pp; Japanese.  
XX  
CC The invention relates to a novel method for manufacturing a labelled  
CC nucleic acid which comprises introducing an l1c to the transduction  
CC region and contacting the nucleic acid fragment and l1c compound, where  
CC the nucleic acid fragment is a polynucleic acid or peptide nucleic acid.  
CC The method of the invention may be useful for manufacturing a labelled  
CC nucleic acid and provides sensitive detection of a target mRNA, such as  
CC neuroglia myofibril acidic protein (GFAP). The current sequence is that  
CC of the labelled nucleic acid/l1c-related PNA-antisense oligo 2 of the  
CC invention.  
XX  
SQ Sequence 13 BP; 3 A; 1 C; 5 G; 4 T; 0 U; 0 Other;

Query Match 2.9%; Score 13; DB 1; Length 13;  
Best Local Similarity 100.0%; Pred. No. 2.8e+02;  
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 46 CTAACCCCTAACTG 58  
Db 13 CTAACCCCTAACTG 1

[illegible]

PN WO9850530-A2.  
XX  
XX  
PD 12-NOV-1998.  
XX  
XX PF 05-MAY-1998; 98WO-US009249.  
XX  
XX 09-MAY-1997; 97US-0046059P.  
PR 09-JUN-1997; 97US-0049002P.  
PR 03-JUL-1997; 97US-0051718P.  
PR 22-AUG-1997; 97US-0056808P.  
PR 02-OCT-1997; 97US-0061321P.  
PR 02-OCT-1997; 97US-0061324P.  
PR 05-NOV-1997; 97US-0064866P.  
PR 19-DEC-1997; 97US-0068212P.  
XX  
XX (RIBO-) RIBOZYME PHARM INC.  
XX  
XX Jarvis T, Matulic-Adamic J, Reynolds M, Kisich K, Bellon L;  
PI Parry T, Beigelman L, Mcswiggen JA, Karpeisky A, Burgin A;  
PI Thompson J, Workman CT, Beaudry A, Sweedler D;  
XX  
XX WPI; 1999-009494/01.  
DR  
XX Identifying new catalytic nucleic acid that modulates selected processes  
PT - especially ribozymes that cleave Raf RNA for treating cancer,  
PT restenosis, and also new ribozymes and modified nucleoside triphosphates  
PT used as antiviral agents and synthons.  
XX  
XX Claim 179; Page 175; 259pp; English.  
PS  
XX A method has been developed for the identification of a nucleic acid  
CC capable of modulating a process in a biological system. The method  
CC comprises: (a) introducing into the system a random library of nucleic  
CC acid catalysts (NAC) having a substrate binding domain (SBD), comprising  
CC a random sequence, and a catalytic domain (CD); and (b) identifying NAC  
CC in systems where modulation has occurred and/or determining the sequence  
CC of at least part of the SBDs in such systems. Nucleic acid molecules with  
CC endonuclease activity and catalytic activity, from the present invention,  
CC are used to modulate gene expression in plant and mammalian cells and to  
CC cleave target nucleic acid, particularly for treating systemic diseases  
CC caused by specific RNA, e.g. cancer, inflammation, psoriasis, non-hepatic  
CC ascites and infection. They may also be used to detect genetic drift and  
CC mutations in diseased cells and to determine c-raf RNA. Specifically NACs  
CC with RNA-cleaving activity that modulate expression of the Raf gene, are  
CC used to treat cancer, restenosis, psoriasis or rheumatoid arthritis, or  
CC generally any condition associated with the level of c-raf. Introduction  
CC of sugar/phosphate modifications increases stability against nuclease and  
CC activity. AAV90922 to AAV93877 represent NACs that can be used in the  
CC method, specifically for modulating the expression of a Raf gene  
XX  
SQ Sequence 14 BP; 1 A; 5 C; 6 G; 0 T; 2 U; 0 Other;

Query Match 2.9%; Score 13; DB 1; Length 14;  
Best Local Similarity 84.6%; Pred. No. 3.1e+02;  
Matches 11; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 181 AGCTGCTGCGCCG 193  
DB 2 AGCUGCGGCCG 14  
||||:|||||  
|||:|||||

RESULT 406  
ADP87937/c  
ID ADP87937 standard; DNA; 14 BP.  
XX  
XX AC ADP87937;  
XX  
XX 26-AUG-2004 (first entry)  
DT  
XX  
DE 2',5'-oligoadenylic acid analog related oligonucleotide #64.  
XX  
XX Cytostatic; virucide; 2'; 5'-oligoadenylic acid analog; antitumour;  
KW antiviral; cancer; ss.

XX Synthetic.  
XX  
XX Key Location/Qualifiers  
FT modified\_base 1..14  
FT /\*tag= a  
FT /mod\_base= OTHER  
FT /note= "2',4'-oxyethylene linkage in the sugar residues  
FT and phosphorothioate backbone"  
FT modified\_base 14  
FT /\*tag= b  
FT /mod\_base= OTHER  
FT /note= "G-hydroxyethyl phosphate"  
XX  
XX WO2004046161-A1.  
XX  
XX 03-JUN-2004.  
XX  
XX 19-NOV-2003; 2003WO-JP014749.  
XX  
XX 19-NOV-2002; 2002JP-00334731.  
XX  
XX (SANY ) SANKYO CO LTD.  
XX  
XX Koizumi M, Morita K;  
PI  
XX WPI; 2004-460494/43.  
DR  
XX Stable 2',5'-oligoadenylic acid analogs containing natural and modified  
PT nucleic acid units as well as unusual phosphate groups with excellent  
PT activity particularly antitumor, applicable in cancer or antiviral  
PT therapy.  
XX  
XX Disclosure; Page 111; 220pp; Japanese.  
PS  
XX The present invention relates to novel 2',5'-oligoadenylic acid analogs  
CC and their pharmacologically-acceptable salts. The analogs are stable  
CC with superior antitumor and antiviral activity and so are useful in  
CC cancer or antiviral therapy e.g. as antitense drugs. The present sequence  
CC was used to illustrate the invention.  
XX  
SQ Sequence 14 BP; 5 A; 1 C; 5 G; 3 T; 0 U; 0 Other;

Query Match 2.9%; Score 13; DB 1; Length 14;  
Best Local Similarity 100.0%; Pred. No. 3.1e+02;  
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 42 TTGTCTAACCCCTA 54  
DB 13 TTGTCTAACCCCTA 1  
|||||

RESULT 407  
AAS98334/c  
ID AAS98334 standard; DNA; 15 BP.  
XX  
XX AC AAS98334;  
XX  
XX 12-MAR-2002 (first entry)  
DT  
XX  
DE Galanin receptor gene GALR1 allele-specific oligonucleotide #46.  
XX  
XX Galanin receptor; GALR1; human; single nucleotide polymorphism; SNP;  
KW drug discovery; haplotyping; infectious diarrhoea;  
KW growth hormone deficiency; allele-specific oligonucleotide; ss.  
XX  
XX Homo sapiens.  
OS  
XX WO200179237-A2.  
PN  
XX 25-OCT-2001.  
PD  
XX 16-APR-2001; 2001WO-US012306.  
PF

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XX 14-APR-2000; 2000US-0197838P.
XX (GENA-) GENAISSANCE PHARM INC.
XX Bentivegna SC, Chew A, Choi JY, Denton RR, Nandabalan K;
XX WPI; 2002-066341/09.
XX
XX Genotyping human galanin receptor gene of an individual for determining
XX haplotype of an individual, involves determining the identity of
XX nucleotide pair at specific polymorphic sites for two copies of the gene.
XX
XX Claim 16; Page 15; 99pp; English.
XX
XX The invention relates to genotyping human galanin receptor (GALR1) gene
XX of an individual, involving determining for the two copies of the GALR1
XX gene present in the individual, the identity of the nucleotide pair at
XX one or more polymorphic sites. The method is useful for determining
XX whether an individual has a haplotype or haplotype pairs defined in the
XX specification. This is useful for improving the efficacy and reliability
XX of several steps in the discovery and development of drugs for treating
XX diseases associated with GALR1 activity, e.g., infectious diarrhoea and
XX growth hormone deficiency, to validate GALR1 as a candidate agent for
XX treating a specific condition or disease predicted to be associated with
XX GALR1 activity, and in the design of clinical trials of candidate drugs
XX for treating a specific condition or disease predicted to be associated
XX with GALR1 activity. The method is useful to screen for compounds
XX targeting GALR1 to treat a specific conditions or disease associated with
XX GALR1 activity. A GALR1 polynucleotide or variant is useful in studying
XX the expression and function of GALR1, and in expressing GALR1 protein for
XX use in screening for candidate drugs to treat diseases related to GALR1
XX activity. The polynucleotide or variant is useful for studying expression
XX of the GALR1 isogenes in vivo, for in vivo screening and testing of drugs
XX targeted against GALR1 protein, and for studying the effect of the
XX variation on the biological activity of GALR1 as well as on the binding
XX affinity of candidate drugs targeting GALR1 for the treatment of
XX infectious diarrhoea and growth hormone insufficiency. AAS98408
XX represent human GALR1 gene allele-specific oligonucleotides used to
XX detect GALR1 gene polymorphisms as described in the method of the
XX invention
XX
XX Sequence 15 BP; 2 A; 3 C; 9 G; 0 T; 0 U; 1 Other;
XX
XX Query Match 2.9%; Score 13; DB 1; Length 15;
XX Best Local Similarity 86.7%; Pred. No. 3.4e+02;
XX Matches 13; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
XX
XX Qy 82 TTGCTCCCGCGCGC 96
XX | : |||||
XX Db 15 TYCCTCCCGCGCGC 1
XX
XX RESULT 408
XX ABK97507
XX ID ABK97507 standard; DNA; 15 BP.
XX
XX AC ABK97507;
XX
XX XX 07-OCT-2002 (first entry)
XX
XX DE Human LCAT gene polymorphism detection ASO primer #16.
XX
XX KW Lecithin-cholesterol acyltransferase; LCAT; Norum disease; gene therapy;
XX fish-eye disease; atherosclerotic cardiovascular disease; forensic;
XX KW population diversity; anthropological lineage; paternity testing; human;
XX KW polymorphism; allele-specific oligonucleotide; ASO; PCR; primer; ss.
XX
XX OS Homo sapiens.
XX
XX XX WO200253575-A1.
XX
XX PD 11-JUL-2002.
XX
XX 03-JAN-2001; 2001WO-US000092.
XX
XX 03-JAN-2001; 2001WO-US000092.
XX
XX (GENA-) GENAISSANCE PHARM INC.
XX
XX Chew A, Denton RR, Nandabalan K, Stephens JC;
XX WPI; 2002-557737/59.
XX
XX Novel isolated polymorphic variant polynucleotide of lecithin-cholesterol
XX acyltransferase gene, useful for studying expression and biological
XX function of the gene, and for therapeutic, diagnostic or forensic
XX purposes.
XX
XX Claim 16; Page 17; 72pp; English.
XX
XX The present invention relates to a new polynucleotide comprising a
XX nucleotide sequence which is a polymorphic variant of a reference
XX sequence for lecithin-cholesterol acyltransferase (LCAT). The invention
XX is useful for identifying an association between a trait (preferably a
XX clinical response to drug targeting LCAT) and at least one genotype or
XX haplotype of LCAT gene. The method of the invention has applicability in
XX developing diagnostic tests and therapeutic treatments for Norum disease,
XX fish-eye disease and atherosclerotic cardiovascular disease. The
XX haplotyping and genotyping methods are useful for studying population
XX diversity, anthropological lineage, the significance of diversity and
XX lineage at the phenotypic level, paternity testing, forensic applications
XX and for identifying association between the LCAT genetic variation and a
XX trait such as level of drug response or susceptibility to disease. In
XX addition, the methods for identifying the LCAT haplotypes present in
XX individuals are useful in the development of drugs targeting LCAT. For
XX example, determining the frequency of individual LCAT haplotypes in a
XX population with a specific disease, e.g. Norum disease, will facilitate
XX the development of drugs targeting the LCAT isoform(s) that are most
XX frequent in that disease population. The present nucleic acid sequence
XX represents one of a collection (ABK97492-ABK97519) of allele-specific
XX oligonucleotide (ASO) primers that were used in the invention to detect
XX polymorphisms in the human LCAT gene
XX
XX Sequence 15 BP; 3 A; 8 C; 2 G; 2 T; 0 U; 0 Other;
XX
XX Query Match 2.9%; Score 13; DB 1; Length 15;
XX Best Local Similarity 100.0%; Pred. No. 3.4e+02;
XX Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX Qy 284 CACCCACTGCCAC 296
XX | : |||||
XX Db 2 CACCCACTGCCAC 14
XX
XX RESULT 409
XX ADG98425/C
XX ID ADG98425 standard; DNA; 15 BP.
XX
XX AC ADG98425;
XX
XX XX 11-MAR-2004 (first entry)
XX
XX DE Human CETP gene allele specific oligonucleotide probe #54.
XX
XX KW human; cholesteryl ester transfer protein; CETP;
XX KW single nucleotide polymorphism; SNP; drug screening; atherosclerosis;
XX KW cardiovascular disease; hypercholesterolaemia;
XX KW allele specific oligonucleotide; ss; probe.
XX
XX OS Homo sapiens.
XX
XX XX WO2003091277-A2.
XX
XX PD 06-NOV-2003.
XX
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PF 28-APR-2003; 2003WO-US013288.  
 XX  
 PR 26-APR-2002; 2002US-0375791P.  
 XX  
 PA (GENA-) GENAISSANCE PHARM INC.  
 PI Anastasio AE, Chew A, Kazemi A, Lachowicz M, Lee HH, Parks KE;  
 PI Petersen N, Rounds E, Sausker EA, Tirrell C;  
 XX WPI; 2003-865576/80.  
 XX  
 XX New isolated polynucleotide useful for haplotyping and/or genotyping  
 PT cholesteryl ester transfer protein (CETP) gene in an individual or in  
 PT screening for drugs useful in treating diseases associated with CETP  
 PT activity.  
 XX  
 PS Claim 43; SEQ ID NO 57; 250pp; English.  
 XX  
 CC The invention comprises the amino acid and coding sequences of the human  
 CC cholesteryl ester transfer protein (CETP), the invention also comprises  
 CC polymorphisms identified within the CETP gene. The DNA and protein  
 CC sequences of the invention are useful in haplotyping and/or genotyping  
 CC the CETP gene in an individual. The DNA and protein sequences may also be  
 CC used to screen drugs or compounds targeting the CETP or its variant to  
 CC treat a condition or disease associated with CETP (e.g. atherosclerosis,  
 CC cardiovascular disease or hypercholesterolemia). The present DNA  
 CC sequence represents an allele specific oligonucleotide probe for the  
 CC human CETP gene.  
 XX  
 SQ Sequence 15 BP; 4 A; 4 C; 5 G; 1 T; 0 U; 1 Other;  
 Query Match 2.9%; Score 13; DB 1; Length 15;  
 Best Local Similarity 86.7%; Pred. No. 3.4e+02;  
 Matches 13; Conservative 1; Mismatches 1; Indels 0; Gaps 0;  
 QY 310 GCTCTGTGAGCGCG 324  
 Db |||||:|||||  
 15 GCTCTGTGAGCGCTCG 1  
 RESULT 410  
 AAT14404  
 ID AAT14404 standard; DNA; 16 BP.  
 AC AAT14404;  
 XX  
 XX 05-AUG-1996 (first entry)  
 DT  
 DE PRRSV sequencing primer Dp966.  
 XX  
 XX Porcine reproductive and respiratory syndrome virus; PRRSV; vaccine;  
 KW antigen; polymerase chain reaction; PCR; primer; ss.  
 XX  
 OS Synthetic.  
 XX  
 XX WO9606619-A1.  
 PN  
 XX  
 XX 07-MAR-1996.  
 PD  
 XX  
 XX 01-SEP-1995; 95WO-US010904.  
 PF  
 XX  
 XX 01-SEP-1994; 94US-00301435.  
 PR  
 XX  
 XX (PAUL/) PAUL P S.  
 PA (MENG/) MENG X.  
 PA (HALB/) HALBUR P.  
 PA (MORO/) MOROZOV I.  
 PA (LUMM/) LUM M A.  
 XX  
 XX Paul PS, Meng X, Halbur P, Morozov I, Lum MA;  
 PI WPI; 1996-160132/16.  
 XX

PT New porcine reproductive and respiratory syndrome virus DNA - and  
 PT proteins encoded by open reading frames of an Iowa strain of the virus;  
 PT are used in vaccines against PRRSV in pigs.  
 XX  
 PS Disclosure; Page 77; 228pp; English.  
 XX  
 CC Primer Dp966 (AAT14404) is specific to porcine reproductive and  
 CC respiratory syndrome virus (PRRSV). It was used with other sequencing  
 CC primers (AAT14381-82) to determine the sequences of the putative membrane  
 CC (M) and nucleocapsid (N) genes of PRRSV isolate ISU-12 (see also AAT14391  
 CC -92) and of 5 other American PRRSV isolates (AAT14405-09) and European  
 CC strain Lelystad (AAT14410)  
 XX  
 SQ Sequence 16 BP; 2 A; 4 C; 6 G; 4 T; 0 U; 0 Other;  
 Query Match 2.9%; Score 13; DB 1; Length 16;  
 Best Local Similarity 100.0%; Pred. No. 3.6e+02;  
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 268 GGGGCTTCTCCGG 280  
 Db |||||:|||||  
 4 GGGGCTTCTCCGG 16  
 RESULT 411  
 AAF01709/c  
 ID AAF01709 standard; DNA; 17 BP.  
 XX  
 AC AAF01709;  
 XX  
 XX 16-FEB-2001 (first entry)  
 DT  
 DE Hammerhead ribozyme substrate #4.  
 XX  
 KW Ribozyme; erythropoietin; granulocyte colony stimulating factor;  
 KW interferon alpha; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO200061729-A2.  
 PN  
 XX  
 XX 19-OCT-2000.  
 PD  
 XX  
 XX 11-APR-2000; 2000WO-US009721.  
 PF  
 XX  
 XX 12-APR-1999; 99US-0129390P.  
 PR  
 XX  
 XX (RIBO-) RIBOZYME PHARM INC.  
 PA  
 XX  
 PI Blatt L, Zwick M, Pavco P, Mcswiggen J;  
 XX  
 XX WPI; 2000-647423/62.  
 DR  
 XX  
 XX Enzymatic and antisense nucleic acid inhibition of repressor genes,  
 PT useful for producing e.g. granulocyte colony stimulating factor protein,  
 PT interferon alpha and erythropoietin.  
 XX  
 XX Claim 37; Page 56; 164pp; English.  
 PS  
 XX  
 XX The present invention relates to enzymatic and antisense nucleic acid  
 CC molecules that act as inhibitors of the expression of repressor genes  
 CC encoding the TR2 Orphan receptor, EAR3/COUP-TF-1, the GATA transcription  
 CC factor gene, IRF-2 and/or the CAAT Displacement Protein (CDP).  
 CC Inhibition of the repressors removes prevents inhibition (and  
 CC consequently increases expression of) genes involved in the production of  
 CC erythropoietin, granulocyte colony stimulating factor protein and  
 CC interferon alpha  
 XX  
 XX Sequence 17 BP; 5 A; 9 C; 2 G; 1 T; 0 U; 0 Other;  
 SQ  
 Query Match 2.9%; Score 13; DB 1; Length 17;  
 Best Local Similarity 100.0%; Pred. No. 3.9e+02;  
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;



Oy 2 GGTTCGGAGGGT 14  
 Db 16 GGTTCGGAGGGT 4

RESULT 412  
 ABZ62076/C  
 ID ABZ62076 standard; RNA; 17 BP.  
 XX  
 AC ABZ62076;  
 XX  
 DT 21-MAR-2003 (first entry)  
 XX  
 DE Human H-Ras DNAzyme target #867.  
 XX  
 KW Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;  
 KW enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytosolic; anti-HIV;  
 KW anti-rheumatic; cancer; AIDS; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO200297114-A2.  
 XX  
 PD 05-DEC-2002.  
 XX  
 PF 29-MAY-2002; 2002WO-US016840.  
 XX  
 PR 29-MAY-2001; 2001US-0294140P.  
 PR 06-JUN-2001; 2001US-0296249P.  
 PR 10-SEP-2001; 2001US-0318471P.  
 XX  
 PA (RIBO-) RIBOZYME PHARM INC.  
 XX  
 PI Mcswiggen J;  
 XX  
 DR WPI; 2003-140484/13.  
 XX  
 PT Novel short interfering RNA and enzymatic nucleic acid useful for  
 PT treating cancer, modulates the expression of a nucleic acid encoding  
 PT HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.  
 XX  
 PS Claim 58; Page 129; 185pp; English.  
 XX  
 CC The invention relates to a novel short interfering RNA (siRNA) nucleic  
 CC acid molecule or an enzymatic nucleic acid molecule, that modulates  
 CC expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras,  
 CC human immunodeficiency virus (HIV) or a component of HIV. The nucleic  
 CC acid molecule of the invention has cytosolic, anti-HIV, and anti-  
 CC rheumatic activity. The nucleic acid molecules are useful for reducing  
 CC HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are  
 CC also useful for treating breast, ovarian, colorectal, lung, prostate,  
 CC bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences  
 CC shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524,  
 CC ABZ66530 - ABZ66585 represent substrate/target sequences for the human  
 CC ribozymes of the invention  
 XX  
 SQ Sequence 17 BP; 1 A; 4 C; 10 G; 0 T; 2 U; 0 Other;  
 Query Match 2.9%; Score 13; DB 1; Length 17;  
 Best Local Similarity 100.0%; Pred. No. 3.9e+02;  
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 225 CCTGCCAGCCCC 237  
 Db 13 CCTGCCAGCCCC 1

RESULT 413  
 AAT80369  
 ID AAT80369 standard; DNA; 16 BP.  
 XX  
 AC AAT80369;

XX 16-OCT-1997 (first entry)  
 XX  
 DE Oligo HCV-222, multiplex forming oligomer.  
 XX  
 KW Complementary; 5' untranslated region; UTR; hepatitis C virus; HCV;  
 KW inhibition; replication; expression; detection; chronic hepatitis;  
 KW acute hepatitis; hepatocarcinoma; ss.  
 XX  
 OS Synthetic.  
 XX  
 FH Key Location/Qualifiers  
 FT modified\_base 1..11  
 FT /\*tag= a  
 FT /note= "2'-OMe RNA"  
 FT modified\_base 12..16  
 FT /\*tag= b  
 FT /note= "Comprises phosphorothioate linkages"  
 XX  
 PN WO9639500-A2.  
 XX  
 PD 12-DEC-1996.  
 XX  
 PF 04-JUN-1996; 96WO-EP002427.  
 XX  
 PR 06-JUN-1995; 95US-00471968.  
 XX  
 PA (HOFF ) HOFFMANN LA ROCHE & CO AG F.  
 PA (HYBR-) HYBRIDON INC.  
 XX  
 PI Frank BL, Goodchild J, Hamlin HA, Kilkuskie RE, Roberts NA;  
 PI Roberts PC, Walther DM, Wolfe JL;  
 XX  
 DR WPI; 1997-043122/04.  
 XX  
 XX Oligo:nucleotide(s) complementary to HCV 5' untranslated region - used in  
 PT the treatment and detection of HCV infection, esp. hepatitis and hepato-  
 PT carcinoma.  
 XX  
 PS Claim 28; Page 22; 100pp; English.  
 XX  
 CC The sequences given in AAT80211-382 represent synthetic oligonucleotides  
 CC which are complementary to a portion of the 5' untranslated region (UTR)  
 CC of hepatitis C virus (HCV). These sequences may be used in a  
 CC pharmaceutical composition for the control or prevention of HCV  
 CC infection. They may be used to inhibit replication or expression of HCV  
 CC or for detecting the presence of HCV in a sample. They may be used to  
 CC inhibit HCV replication in a cell and are therefore useful in the  
 CC treatment of HCV infections such as chronic and acute hepatitis and  
 CC hepatocarcinoma. This sequence forms multiplex binding complexes with  
 CC regions of the HCV genome. This sequence forms a duplex at the region -  
 CC 218 to -227 and forms a purine strand triplex at the region -212 to -222  
 XX  
 SQ Sequence 16 BP; 0 A; 7 C; 6 G; 2 T; 1 U; 0 Other;  
 Query Match 2.8%; Score 12.8; DB 1; Length 16;  
 Best Local Similarity 81.2%; Pred. No. 3.8e+02;  
 Matches 13; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

Oy 199 CCCTCCCGGGGACCTG 214  
 Db 1 CCCUCCGGGGGTCCTG 16

RESULT 414  
 AAC73638  
 ID AAC73638 standard; DNA; 16 BP.  
 XX  
 AC AAC73638;  
 XX  
 DT 02-FEB-2001 (first entry)  
 XX  
 DE Reverse primer #142 used in multiplexing PCR/SBE assay.

```
XX Oligonucleotide array; genotyping; single base extension reaction; SBE;
KW PCR primer; polymorphic locus; single nucleotide polymorphism; ss.
XX
XX Unidentified.
XX WO200058516-A2.
XX
XX 05-OCT-2000.
XX
XX 27-MAR-2000; 2000WO-US008069.
XX
XX 26-MAR-1999; 99US-0126473P.
XX 23-JUN-1999; 99US-0140359P.
XX
XX (WHEED ) WHITEHEAD INST BIOMEDICAL RES.
XX (AFFY-) AFFYMETRIX INC.
XX
XX Fan J, Hirschhorn JN, Huang X, Kaplan P, Lander ES, Lockhart DJ;
XX Ryder T, Sklar P;
XX WPI; 2000-656171/63.
XX
XX Universal array of oligonucleotides tags attached to a solid substrate
XX along with locus-specific tagged oligonucleotides useful in genotyping
XX using single base extension reactions.
XX
XX Example 7; Page 63; 70pp; English.
XX
XX The present invention relates to an oligonucleotide array comprising
XX oligonucleotide tags fixed to a solid substrate. The oligonucleotide
XX array is useful for genotyping a nucleic acid sample at one or more loci
XX via single base extension (SBE) reactions. A pair of primers is used to
XX amplify a polymorphic locus in a sample e.g. a single nucleotide
XX polymorphism (SNP). The present sequence is one of the primers used in
XX the method of the present invention to amplify a polymorphic sample. The
XX amplified nucleic acid product is then used as a template in a SBE
XX reaction with an extension primer. The SBE reaction products are used to
XX form the oligonucleotide array
XX
XX Sequence 16 BP; 2 A; 2 C; 8 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 2.8%; Score 12.8; DB 1; Length 16;
XX Best Local Similarity 87.5%; Pred. No. 3.8e+02;
XX Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX QY 24 AGGGTGGTGGCCATT 39
XX 1 AGGGTGGTGGCCAGT 16
XX
XX RESULT 415
XX ABS65953
XX ID ABS65953 standard; DNA; 16 BP.
XX
XX AC ABS65953;
XX
XX 15-NOV-2002 (first entry)
XX
XX Inhibitory oligonucleotide specific for hepatitis C virus #159.
XX
XX Hepatitis C virus; HCV; hepatocyte infection; non-A hepatitis;
XX non-B hepatitis; acute hepatitis; chronic hepatitis;
XX hepatocellular carcinoma; virucide; cytostatic; antisense therapy;
XX gene therapy; ss; DNA-RNA hybrid.
XX
XX Synthetic.
XX
XX US2002081577-A1.
XX
XX 27-JUN-2002.
XX
XX 02-JUL-1997; 97US-00887505.
XX
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XX 06-JUN-1995; 95US-00471968.
XX 02-JUL-1996; 96US-0021104P.
XX
XX (KILK/) KILKUSKIE R L.
XX (FRAN/) FRANK B L.
XX (GOOD/) GOODCHILD J.
XX (WOLF/) WOLFE J L.
XX (ROBE/) ROBERTS P C.
XX (HAML/) HAMLIN H A.
XX (ROBE/) ROBERTS N A.
XX (WALT/) WALTHER D M.
XX
XX Kilkuskie RL, Frank BL, Goodchild J, Wolfe JL, Roberts PC;
XX Hamlin HA, Roberts NA, Walther DM;
XX WPI; 2002-537132/57.
XX
XX Synthetic oligonucleotides complementary to a portion of the 5'
XX untranslated region of hepatitis C virus (HCV), useful for diagnosing and
XX treating HCV infections and hepatocellular carcinoma.
XX
XX Claim 31; Page 7; 74pp; English.
XX
XX The invention describes synthetic oligonucleotides complementary to a
XX portion of the 5' untranslated region of hepatitis C virus. The
XX oligonucleotides may be used in methods for controlling, preventing, and
XX treating hepatitis C virus infection, in antisense technology and gene
XX therapy, and of detecting the presence of hepatitis C virus in a sample.
XX Hepatitis C virus (HCV) is an enveloped, positive sense, single-stranded
XX RNA virus which infects hepatocytes. HCV is the major cause of non-A, non
XX -B, acute and chronic hepatitis, and has been associated with
XX hepatocellular carcinoma. The invention describes methods and kits for
XX inhibiting replication of HCV, inhibiting the expression of HCV nucleic
XX acid and protein, and for treating HCV infections. This sequence
XX represents a synthetic DNA-RNA hybrid oligonucleotide used for inhibiting
XX HCV replication and expression of HCV
XX
XX Sequence 16 BP; 0 A; 7 C; 6 G; 2 T; 1 U; 0 Other;
XX
XX Query Match 2.8%; Score 12.8; DB 1; Length 16;
XX Best Local Similarity 81.2%; Pred. No. 3.8e+02;
XX Matches 13; Conservative 1; Mismatches 2; Indels 0; Gaps 0;
XX
XX QY 199 CCTCTCCCGGGGACCTG 214
XX 1 CCCUCGGGGGTCTCTG 16
XX
XX RESULT 416
XX ABT34275/c
XX ID ABT34275 standard; DNA; 16 BP.
XX
XX AC ABT34275;
XX
XX 12-JUN-2003 (first entry)
XX
XX Serotonin receptor 1D probe SEQ ID No 61.
XX
XX Eating disorder; polymorphism; dataset; allele; HGBASE identification;
XX serotonin receptor 1D; delta-opioid receptor; dopamine receptor D2;
XX anorexia nervosa; bulimia nervosa; probe; ss.
XX
XX Unidentified.
XX
XX WO2003012143-A1.
XX
XX 13-FEB-2003.
XX
XX 16-JUL-2002; 2002WO-US022555.
XX
XX 16-JUL-2001; 2001US-0305153P.
XX 20-JUL-2001; 2001US-0306440P.
XX
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PR 13-NOV-2001; 2001US-0331285P.
PR 19-DEC-2001; 2001US-0340843P.
PR 19-DEC-2001; 2001US-0340844P.
XX
XX (PRIC-) PRICE FOUND LTD.
XX
XX Bergen AW, Yeager M;
XX
XX WPI; 2003-268122/26.
XX
XX New nucleic acid molecule having polymorphisms in the serotonin receptor
PT 1D, delta-opioid receptor, or dopamine receptor D2, useful in diagnostic
PT and prognostic assays for eating disorders, such as anorexia and bulimia
PT nervosa.
XX
XX Example 3; Page 60; 149pp; English.
XX
XX The invention relates to a novel isolated nucleic acid molecule
CC comprising a variant gene associated with an eating disorder and selected
CC from any of 119 polymorphisms with their corresponding genotyping in
CC dataset, alleles and HGBASE identification, given in the specification.
CC The novel nucleic acid molecule has polymorphisms in the serotonin
CC receptor 1D, delta-opioid receptor, or dopamine receptor D2, which is
CC useful in diagnostic and prognostic assays for eating disorders, in
CC particular anorexia nervosa and bulimia nervosa. This polynucleotide
CC sequence represents a serotonin receptor 1D probe of the invention
XX
XX Sequence 16 BP; 4 A; 10 C; 2 G; 0 T; 0 U; 0 Other;
SQ
Query Match 2.8%; Score 12.8; DB 1; Length 16;
Best Local Similarity 87.5%; Pred. No. 3.8e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 2 GGTTCGGAGGCTGGG 17
DB 16 GCTTGGCGTGGTGGG 1
RESULT 417
ADN14388/C
ID ADN14388 standard; DNA; 16 BP.
AC ADN14388;
XX
XX 15-JUL-2004 (first entry)
XX
XX Pyrimidine nucleotide flanking sequence 3.
XX
XX ss; RNA complex; immunosuppressive; cytostatic; cancer;
XX systemic lupus erythematosus; Alzheimer's; Huntington's disease;
XX salivary gland carcinoma; melanoma; brain tumour; leukaemia; lymphoma;
XX gene therapy.
XX
XX Synthetic.
XX
XX WO2004035765-A2.
XX
XX 29-APR-2004.
XX
XX 20-OCT-2003; 2003WO-US033466.
XX
XX 18-OCT-2002; 2002US-0419532P.
XX
XX 28-OCT-2002; 2002US-0421757P.
XX
XX (NUCL-) NUCLEONICS INC.
XX
XX Pachuk CJ, Satischchandan C, McCallus DE;
XX
XX WPI; 2004-348454/32.
XX
XX New substantially pure ribonucleic acid (RNA) complex comprising a first
PT strand and a second strand that hybridize to each other, useful for
PT treating cancer, systemic lupus erythematosus, Alzheimer's disease or
PT
```

```
PT Huntington's disease.
XX
XX Example 9; Page 119; 204pp; English.
XX
XX This invention relates to double stranded ribonucleic acid (RNA)
CC structures and constructs. Specifically, it comprises first and second
CC RNA strands that hybridize to each other under physiological conditions
CC to form a double-strand region, wherein the double-strand region contains
CC one or more mismatched regions that result in two or more double-stranded
CC segments. Furthermore, the mismatched regions may be cleaved by single-
CC strand ribonuclease enzymes. The present invention describes expression
CC vectors that encode dsRNA with an intron containing exemplary target
CC genes such as antibiotic resistance genes. Accordingly, using gene
CC therapy, these RNA complexes exhibit immunosuppressive and cytostatic
CC activities and can be used to treat cancer, systemic lupus erythematosus,
CC Alzheimer's and Huntington's disease. The cancer is selected from,
CC amongst others, prostate, breast, ovarian, salivary gland carcinoma,
CC melanoma, brain tumour, leukaemia and lymphoma. This oligonucleotide
CC sequence is a DNA flanking sequence used in an exemplification of the
CC invention.
XX
XX Sequence 16 BP; 0 A; 10 C; 0 G; 6 T; 0 U; 0 Other;
SQ
Query Match 2.8%; Score 12.8; DB 1; Length 16;
Best Local Similarity 87.5%; Pred. No. 3.8e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 370 GAAGAGGACGCGGCG 385
DB 16 GAAGAGGAGGGAGGG 1
RESULT 418
AAT12444
ID AAT12444 standard; DNA; 17 BP.
XX
XX AAT12444;
XX
XX 17-SEP-1996 (first entry)
XX
XX Antiviral phosphorothioate oligonucleotide #27.
XX
XX Antiviral; phosphorothioate; mRNA 4; herpes simplex virus 1; HSV;
XX viral infection; HIV; varicella zoster virus; VZV; therapy; ss.
XX
XX Synthetic.
XX
XX Key Location/Qualifiers
XX modified_base 1..17
XX /tag= a
XX /note= "phosphorothioate oligonucleotides"
XX
XX WO9603500-A1.
XX
XX 08-FEB-1996.
XX
XX 25-JUL-1995; 95WO-JP001472.
XX
XX 26-JUL-1994; 94JP-00173862.
XX
XX 01-NOV-1994; 94JP-00268603.
XX
XX (LTTL-) LTT INST CO LTD.
XX
XX (KAKE) KAKEN PHARM CO LTD.
XX
XX Shoji Y, Shimada J, Mizushima Y, Iwatani W, Tamura N;
XX
XX WPI; 1996-117045/12.
XX
XX Antiviral phosphorothioate oligonucleotide(s) - active against e.g.
XX herpes simplex virus 1, HIV and varicella zoster virus.
XX
XX Claim 6; Page 150; 163pp; Japanese.
XX
```



AC AAV20570;  
 XX  
 DT 02-JUL-1998 (first entry)  
 XX  
 DE Human BRCA1 probe #4.  
 XX  
 KW Breast cancer; ovarian cancer; mutation; classification; detection;  
 KW tumour; diagnostic; prognostic; probe; ss.  
 XX  
 OS Synthetic.  
 OS Homo sapiens.  
 XX  
 PN WO9805677-A1.  
 XX  
 PD 12-FEB-1998.  
 XX  
 PF 04-AUG-1997; 97WO-US013654.  
 XX  
 PR 05-AUG-1996; 96US-0023184P.  
 PR 05-AUG-1996; 96US-0023187P.  
 PR 05-AUG-1996; 96US-0023223P.  
 PR 06-AUG-1996; 96US-0022421P.  
 XX  
 PA (ONCO-) ONCORMED INC.  
 XX  
 PI Murphy PD, Allen AC, White MB, Olson SJ, Zeng B;  
 XX  
 DR WPI; 1998-159166/14.  
 XX  
 PT Detection of mutation(s) in the BRCA1 gene - by hybridisation with an  
 PT allele-specific oligo:nucleotide or by amplification, useful particularly  
 PT for breast or ovarian cancers.  
 XX  
 PS Example 4; Page 40; 62pp; English.  
 XX  
 CC AAV20567-V20574 are probes used in a method to detect mutations in the  
 CC human BRCA1 gene. Such mutations are used for classifying a tumour for  
 CC diagnostic and prognostic purposes or detecting a predisposition of  
 CC higher susceptibility to breast and ovarian cancer in an individual. The  
 CC methods can be used for reducing the high incidence and mortality  
 CC associated with breast and ovarian cancer through the early detection of  
 CC women at high risk. These women, once identified, can be targeted for  
 CC more aggressive prevention programmes  
 XX  
 SQ Sequence 17 BP; 8 A; 1 C; 7 G; 1 T; 0 U; 0 Other;  
 Query Match 2.8%; Score 12.8; DB 1; Length 17;  
 Best Local Similarity 87.5%; Pred. No. 4e+02; Mismatches 0; Gaps 0;  
 Matches 14; Conservative 0; Indels 2; Indels 0; Gaps 0;  
 OY 366 GCAGGAGAGGAGGACGG 381  
 DB |||||  
 2 GAAGAGAGGAGGACGG 17  
 RESULT 422  
 AAX04779  
 ID AAX04779 standard; DNA; 17 BP.  
 XX  
 AC AAX04779;  
 XX  
 DT 14-APR-1999 (first entry)  
 XX  
 DE Group-specific amplification primer for HLA-DRB02.  
 XX  
 KW Human Leukocyte Antigen; HLA; HLA-DRB consensus sequence; intron 1;  
 KW HLA class II group type; histocompatibility analysis;  
 KW compatibility analysis; PCR primer; ss.  
 XX  
 OS Synthetic.  
 OS Homo sapiens.  
 XX  
 PN EP887423-A1.

XX 30-DEC-1998.  
 PD  
 XX 26-JUN-1997; 97EP-00110438.  
 PF  
 XX 26-JUN-1997; 97EP-00110438.  
 PR  
 XX (BIOT-) BIOTEST AG.  
 PA  
 XX Blasczyk R;  
 PI  
 XX WPI; 1999-047888/05.  
 DR  
 XX  
 PT Determining the Human Leukocyte Antigen Class II type Histocompatibility  
 PT antigens - by using new intron-specific oligonucleotide primers for  
 PT sequence specific primer PCR and sequencing.  
 XX  
 PS Claim 13; Fig 3A; 36pp; English.  
 XX  
 CC AAX04778-93 represent group-specific amplification primers for Human  
 CC Leukocyte Antigen (HLA)-DRB sequences. The primers are used in the  
 CC methods of the invention. The specification describes a method for  
 CC determining the HLA class II group type of a subject. The method  
 CC comprises amplifying a target DNA sample from a subject using a  
 CC particular HLA group-specific primer pair and determining whether a  
 CC nucleic acid product is produced, therefore identifying the group type.  
 CC Methods for determining the HLA class allele type of a subject are also  
 CC described, where a specific HLA group-specific exon region primer pair is  
 CC used. The methods are useful for determining the HLA Class II type of a  
 CC patient sample, by identifying the specific alleles present and  
 CC determining the group specificity of alleles. The methods are  
 CC diagnostically useful for histocompatibility analysis to see if donor and  
 CC recipient groups match, and for further compatibility analysis  
 XX  
 SQ Sequence 17 BP; 2 A; 10 C; 4 G; 1 T; 0 U; 0 Other;  
 Query Match 2.8%; Score 12.8; DB 1; Length 17;  
 Best Local Similarity 87.5%; Pred. No. 4e+02; Mismatches 0; Gaps 0;  
 Matches 14; Conservative 0; Indels 2; Indels 0; Gaps 0;  
 OY 232 AGCCCCCGAACCACCGC 247  
 DB |||||  
 1 AGCCCCCGCACCCCGC 16  
 RESULT 423  
 AAX00304  
 ID AAX00304 standard; DNA; 17 BP.  
 XX  
 AC AAX00304;  
 XX  
 DT 23-APR-1999 (first entry)  
 XX  
 DE Human leukocyte antigen class II type PCR primer DRB02.  
 XX  
 KW Human leukocyte antigen class II type; HLA class II type;  
 KW histocompatibility locus antigen class II; PCR primer; ss.  
 XX  
 OS Synthetic.  
 OS Homo sapiens.  
 XX  
 PN EP892069-A2.  
 XX  
 DT 20-JAN-1999.  
 XX  
 DE 25-JUN-1998; 98EP-00111696.  
 PF  
 XX 26-JUN-1997; 97EP-00110438.  
 PR  
 XX (BIOT-) BIOTEST AG.  
 PA  
 XX Blasczyk R;  
 PI  
 XX

DR WPI; 1999-083585/08.

XX Determining the Human Leukocyte Antigen Class II type Histocompatibility

PT antigens - by using new intron-specific oligonucleotide primers for

PT sequence specific primer PCR and sequencing.

XX Claim 4; Fig 3; 36pp; English.

XX A method has been developed of determining the Human Leukocyte Antigen

CC class II (HLA Class II) group type of a subject. The method comprises:

CC (i) amplifying a target DNA sample from a subject using a particular HLA

CC group-specific primer pair (sequence specific primer PCR - SSP-PCR); and

CC (ii) determining whether a nucleic acid product is produced, therefore

CC identifying the group type. AAX00303 to AAX00396 represent specifically

CC claimed oligonucleotide primer for use in the above method. These

CC oligonucleotides are useful for determining the HLA Class II type of a

CC patient sample, by identifying the specific alleles present and

CC determining the group specificity of alleles. Steps (i) and (ii) in the

CC method are diagnostically useful for histocompatibility analysis to see

CC if donor and recipient groups match. The new sequences are useful for

CC providing an insight into the genetic relationship between different

CC alleles of HLA Class II genes. The high resolution, nucleic acid based

CC method using the intron-specific primers is more efficient than prior art

CC methods using exon based primers, as few exon sequences offer conserved

CC primer binding sites, resulting in a limited number of primer pairs and

CC insufficient specificity for alleles, as allelic variations exist between

CC the primer sites. The SSP-PCR method allows separation of haplotypes in

CC 95% of patient samples, allowing resolution of cis-trans linkages of

CC heterozygous sequencing results which cannot be achieved with other

CC protocols

XX Sequence 17 BP; 2 A; 10 C; 4 G; 1 T; 0 U; 0 Other;

SQ Query Match 2.8%; Score 12.8; DB 1; Length 17;

Best Local Similarity 87.5%; Pred. No. 4e+02; Indels 0; Gaps 0;

Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 232 AGCCCCCGAACC CGC 247

Db 1 AGCGCCGCGACCCCGC 16

RESULT 424

AAX55127/c

ID AAX55127 standard; DNA; 17 BP.

AC AAX55127;

XX 05-JUL-1999 (first entry)

DE C/EBP-beta antisense oligonucleotide fragment.

XX Antisense oligonucleotide; multiple target; antisense treatment;

KW impaired respiration; inflammation; lung disease;

KW pulmonary vasoconstriction; inflammation; allergic rhinitis;

KW acute asthma; allergy; asthma; impeded respiration;

KW respiratory distress syndrome; pain; cystic fibrosis;

KW pulmonary hypertension; pulmonary vasoconstriction; emphysema;

KW chronic obstructive pulmonary disease; leukemia; lymphoma; carcinoma;

KW colon cancer; breast cancer; lung cancer; pancreatic cancer;

KW hepatocellular carcinoma; kidney cancer; melanoma; hepatic metastasis;

KW prostate cancer; ss.

XX Synthetic.

OS WO9913886-A1.

XX 25-MAR-1999.

XX 17-SEP-1998; 98WO-US019419.

XX 17-SEP-1997; 97US-0059160P.

PR 09-JUN-1998; 98US-00093972.

XX (UYEC-) UNIV EAST CAROLINA.

XX Myce JW;

XX WPI; 1999-229400/19.

XX New antisense oligonucleotides used in treatment of, e.g. pulmonary

PT vasoconstriction.

XX Disclosure; Page 71; 120pp; English.

XX The specification describes antisense oligonucleotides (AAX52869-X55271)

CC directed against at least 2 mRNAs selected from target genes, coding and

CC non-coding regions of RNAs corresponding to target genes, gene initiation

CC codons, genomic flanking regions, intron-exon borders, the 5'-end, the 3'

CC end and the juxta-section between coding and non-coding regions and all

CC segments of RNAs encoding proteins associated with one or more diseases,

CC conditions or mixtures. The antisense oligonucleotides may be derived

CC from sequences AAX55272-74. These multiple target oligonucleotides

CC (specifically AAX55180-271) can be used for the antisense treatment of

CC diseases and conditions. Typical diseases and conditions are those

CC associated with impaired respiration and inflammation, including lung

CC diseases, pulmonary vasoconstriction, inflammation, allergic rhinitis,

CC acute asthma, allergies, asthma, impeded respiration, respiratory

CC distress syndrome, pain, cystic fibrosis, pulmonary hypertension,

CC pulmonary vasoconstriction, emphysema, chronic obstructive pulmonary

CC disease (COPD), and cancers such as leukemias, lymphomas, carcinomas e.g.

CC colon cancer, breast cancer, lung cancer, pancreatic cancer,

CC hepatocellular carcinoma, kidney cancer, melanoma, hepatic metastases, as

CC well as all types of cancers which may metastasize or have metastasized

CC to the lungs, including breast and prostate cancer

XX Sequence 17 BP; 0 A; 12 C; 5 G; 0 T; 0 U; 0 Other;

SQ Query Match 2.8%; Score 12.8; DB 1; Length 17;

Best Local Similarity 87.5%; Pred. No. 4e+02; Indels 0; Gaps 0;

Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 257 GCGGTCGGCCGCGGCGC 272

Db 16 GCGGGCGCGCGGGGC 1

RESULT 425

AAA34574/c

ID AAA34574 standard; DNA; 17 BP.

AC AAA34574;

XX 28-JUL-2000 (first entry)

DE Human adenosine receptor related polynucleotide SEQ ID NO:2263.

XX Human; adenosine receptor; low adenosine antisense oligonucleotide;

KW phosphorothioate; impaired respiration; inflammation; allergy;

KW allergic disease; bronchoconstriction; inhibitor; anti-inflammatory;

KW antiallergic; antiasthmatic; cytostatic; analgesic; impaired airway;

KW lung disease; ischaemic condition; pulmonary vasoconstriction; asthma;

KW respiratory distress syndrome; pain; cystic fibrosis; emphysema;

KW pulmonary hypertension; chronic obstructive pulmonary disease; COPD;

KW cancer; leukaemia; lymphoma; carcinoma; metastasis; ss.

XX Homo sapiens.

OS WO200009525-A2.

XX 24-FEB-2000.

XX 03-AUG-1999; 99WO-US017712.

XX 03-AUG-1998; 98US-0095212P.

PA (UYEC-) UNIV EAST CAROLINA.  
XX  
PI Nyce JW;  
XX  
DR WPI; 2000-205971/18.  
XX  
XX  
XX New antisense oligonucleotides useful for treating e.g. pulmonary  
PT vasoconstriction, inflammation, allergies, asthma, hypertension,  
PT bronchitis, emphysema, respiratory distress syndrome, ischemia or  
PT cancers.  
XX  
XX  
XX Disclosure; Page 548; 1343pp; English.  
PS  
XX  
XX The present invention describes a new composition comprising an antisense  
CC oligonucleotide (ON) with low adenine (up to 15%), which targets  
CC nucleic acids involved in bronchoconstriction, allergies, and/or  
CC inflammation. The ON can have anti-inflammatory, antiallergic,  
CC antiasthmatic, cytostatic and analgesic activities. The compositions are  
CC useful for the treatment of diseases associated with inflammation,  
CC impaired airways, including lung disease and diseases whose secondary  
CC effects afflict the lungs of a subject. They can be used for treating  
CC e.g. ischaemic conditions, pulmonary vasoconstriction, allergies, asthma,  
CC impeded respiration, respiratory distress syndrome, pain, cystic  
CC fibrosis, pulmonary hypertension, emphysema, chronic obstructive  
CC pulmonary disease (COPD), and cancers such as leukaemias, lymphomas,  
CC carcinomas, and cancers which may metastasize to the lungs, including  
CC breast and prostate cancer. The reduction of the adenine content of the  
CC ONs reduces side effects. The A-containing ONs break down with the  
CC release of deoxyadenosine which activates adenosine receptors causing  
CC bronchoconstriction and inflammation. AAA32313 to AAA35312 represent the  
CC nucleotide sequences given in the sequence listing from the present  
CC invention, which correspond to SEQ ID NO:1 to 2815, and then the last 185  
CC sequences are also called SEQ ID NO:1 to 185, but the sequences differ  
CC from the previously named sequences. SEQ ID NO:11 to 1680 (AAA32323 to  
CC AAA3392) are specifically claimed ONs from the present invention. N.B.  
CC Sequences given in the disclosure of the present invention do not match  
CC up with their corresponding SEQ ID NO: sequences given in the sequence  
CC listing  
XX  
SQ Sequence 17 BP; 0 A; 12 C; 5 G; 0 T; 0 U; 0 Other;  
  
Query Match 2.8%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 87.5%; Pred. No. 4e+02;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
Qy 257 GCGGTGCGCGCGGCGC 272  
Db 16 GCGGGCGCGCGGCGC 1  
|||||  
  
RESULT 426  
AAF20696/c  
ID AAF20696 standard; DNA; 17 BP.  
XX  
XX AAF20696;  
AC  
XX  
DT 14-MAR-2001 (first entry)  
XX  
XX Human C/EBP polynucleotide fragment #2263.  
XX  
XX Low adenine antisense oligonucleotide; phosphorothioate; allergy;  
KW human; airway disorder; bronchoconstriction; lung inflammation;  
KW surfactant depletion; respiratory bronchodilator; antiinflammatory;  
KW immunosuppressive; antiasthmatic; analgesic; hypotensive; cytostatic;  
KW respiratory obstruction; pulmonary obstruction; impeded respiration;  
KW surfactant hypoproduction; pulmonary vasoconstriction; asthma; RDS;  
KW respiratory distress syndrome; pain; cystic fibrosis; allergic rhinitis;  
KW pulmonary hypertension; emphysema; pulmonary transplantation rejection;  
KW chronic obstructive pulmonary disease; pulmonary infection; bronchitis;  
KW cancer; ss.  
XX  
XX Homo sapiens.  
OS  
XX

PN WC200062736-A2.  
XX  
PD 26-OCT-2000.  
XX  
XX 24-MAR-2000; 2000MO-US008020.  
PF  
XX 06-APR-1999; 99US-0127958P.  
PR  
XX (UYEC-) UNIV EAST CAROLINA.  
PA (NYCE/) NYCE J W.  
XX  
XX Nyce JW;  
PI  
XX WPI; 2000-679539/66.  
DR  
XX Low adenine (A) content antisense oligonucleotides which do not trigger  
PT adenosine receptors during metabolism, useful e.g. for treating cancers  
PT and respiratory obstructions.  
PT  
XX  
XX Claim 14; Page 265; 1592pp; English.  
PS  
XX The present invention describes low adenine (A) content antisense  
CC oligonucleotides and compositions (I) comprising them. In the antisense  
CC oligonucleotides the A is replaced by a 'Universal' or alternative base.  
CC (I) can have respiratory, bronchodilator, antiinflammatory, analgesic,  
CC immunosuppressive, antiasthmatic, hypotensive and cytostatic activities.  
CC The antisense oligonucleotides and (I) can be used to down-regulate the  
CC expression and/or activity of target polypeptides associated with  
CC lung/respiratory disorders and malignancies, such as stimulating and  
CC activating peptide factors and transmitters, transcription factors,  
CC immunoglobulins and antibodies, antibody receptors, cytokines and  
CC chemokines, endogenously produced specific and non-specific enzymes,  
CC binding proteins, adhesion molecules and their receptors, cytokine and  
CC chemokine receptors, adenosine receptors, bradykinin receptors, central  
CC nervous system (CNS) and peripheral nervous and non-nervous system  
CC receptors, CNS and peripheral nervous and non-nervous system peptide  
CC transmitters, defensins, growth factors, vasoactive peptides and  
CC receptors, binding proteins and malignancy associated proteins. The  
CC antisense oligonucleotides may be used in this way to treat disorders  
CC including respiratory obstruction (especially pulmonary obstruction  
CC and/or bronchoconstriction) and/or lung inflammation, allergy(ies) and/or  
CC surfactant hypoproduction which are associated with a disease or  
CC condition selected from pulmonary vasoconstriction, inflammation,  
CC allergies, asthma, impeded respiration, respiratory distress syndrome  
CC (RDS), pain, cystic fibrosis (CF), allergic rhinitis (AR), pulmonary  
CC hypertension, emphysema, chronic obstructive pulmonary disease (COPD),  
CC pulmonary transplantation rejection, pulmonary infections, bronchitis,  
CC and/or cancer. AAF18434 to AAF21543 represent human polynucleotide  
CC fragments and antisense oligonucleotides used in the exemplification of  
CC the present invention  
XX  
XX Sequence 17 BP; 0 A; 12 C; 5 G; 0 T; 0 U; 0 Other;  
  
Query Match 2.8%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 87.5%; Pred. No. 4e+02;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
Qy 257 GCGGTGCGCGCGGCGC 272  
Db 16 GCGGGCGCGCGGCGC 1  
|||||  
  
RESULT 427  
AAF06158  
ID AAF06158 standard; DNA; 17 BP.  
XX  
XX AAF06158;  
AC  
XX 16-FEB-2001 (first entry)  
DT  
XX  
XX Hammerhead ribozyme substrate #2955.  
DE  
XX Ribozyme; erythropoietin; granulocyte colony stimulating factor;  
KW





XX Claim 4; Page 52; 115pp; English.

XX The present invention provides nucleic acid molecules capable of

CC downregulating the expression of the human checkpoint kinase-1 (Chk1)

CC gene. These may be antisense or ribozyme sequences, and are useful in the

CC treatment of diseases associated with conditions affected by Chk1 levels,

CC including cancer. The present sequence is an oligonucleotide described in

CC the exemplification of the invention

XX

SQ Sequence 17 BP; 5 A; 2 C; 7 G; 0 T; 3 U; 0 Other;

Query Match 2.8%; Score 12.8; DB 1; Length 17;

Best Local Similarity 87.5%; Pred. NO. 4e+02;

Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 272 CTTCTCCGAGGCACC 287

Db 17 CTTCTCCATAGGCACC 2

|||||

RESULT 430

AAH95534/C

ID AAH95534 standard; RNA; 17 BP.

XX

AC AAH95534;

XX

DT 09-OCT-2001 (first entry)

XX

DE Human Chk1 ribozyme substrate SEQ ID NO: 959.

XX

XX Human; checkpoint kinase-1; Chk1; antisense; ribozyme; gene therapy;

KW RNA cleavage; cancer; ss.

XX

OS Homo sapiens.

XX

PN WO200157206-A2.

XX

PD 09-AUG-2001.

XX

XX 02-FEB-2001; 2001WO-US003504.

PF

XX 03-FEB-2000; 2000US-0179983P.

PR

XX (RIBO-) RIBOZYME PHARM INC.

PA

PA (FATT/) FATTAEY A R.

XX

XX Fattaey AR, Jarvis T, Mcswiggen J, Bocher RN, Holman PS;

PI

XX WPI; 2001-496922/54.

DR

XX Novel nucleic acid molecule e.g., ribozymes or antisense nucleic acid

PT molecules, which downregulates expression of a checkpoint kinase-1 gene,

PT useful for treating colorectal, lung, breast or prostate cancers.

XX

XX Claim 4; Page 77; 115pp; English.

PS

XX The present invention provides nucleic acid molecules capable of

CC downregulating the expression of the human checkpoint kinase-1 (Chk1)

CC gene. These may be antisense or ribozyme sequences, and are useful in the

CC treatment of diseases associated with conditions affected by Chk1 levels,

CC including cancer. The present sequence is an oligonucleotide described in

CC the exemplification of the invention

XX

SQ Sequence 17 BP; 5 A; 2 C; 7 G; 0 T; 3 U; 0 Other;

Query Match 2.8%; Score 12.8; DB 1; Length 17;

Best Local Similarity 87.5%; Pred. NO. 4e+02;

Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 272 CTTCTCCGAGGCACC 287

Db 17 CTTCTCCATAGGCACC 2

|||||

RESULT 431

ABK00059/C

ID ABK00059 standard; RNA; 17 BP.

XX

AC ABK00059;

XX

DT 12-MAR-2002 (first entry)

XX

DE Human NOGO Hammerhead Ribozyme #59.

XX

XX Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;

KW cerebroprotective; neurotropic; neuroprotective; antiparkinsonian;

KW muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme;

KW DNAAzyme; inozyme; G-cleaver; amberyzyme; zinzyme; lymphoma; leukaemia;

KW B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;

KW human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;

KW MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia;

KW inflammatory arthropathy; central nervous system injury;

KW cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;

KW chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;

KW Parkinson's disease; ataxia; Huntington's disease;

KW Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.

XX

OS Homo sapiens.

OS

OS Synthetic.

XX

PN WO200159103-A2.

XX

PD 16-AUG-2001.

XX

XX 09-FEB-2001; 2001WO-US004273.

PF

XX 11-FEB-2000; 2000US-0181797P.

PR

XX 28-FEB-2000; 2000US-0185516P.

PR

XX 06-MAR-2000; 2000US-0187128P.

PR

XX (RIBO-) RIBOZYME PHARM INC.

PA

PA (BLAT/) BLATT L.

PA

PA (MCSW/) MCSWIGGEN J.

PA

PA (CHOW/) CHOWRIRA B M.

XX

XX Blatt L, Mcswiggen J, Chowrira BM;

PI

XX WPI; 2001-607195/69.

DR

XX Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense

PT constructs, which down regulate expression of a CD20 gene or neurite

PT growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and

PT central nervous system injury.

XX

XX Claim 88; Page 66; 200pp; English.

PS

XX The invention relates to a nucleic acid molecule which down regulates

CC expression of a CD20 gene and a nucleic acid molecule which down

CC regulates expression of a neurite growth inhibitor gene (NOGO). The

CC nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a

CC DNAAzyme) an inozyme (an endolytic nucleic acid cleaving an RNA molecule

CC possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN motif) or

CC an amberyzyme (cleaving RNA with an NGN triplet), a zinzyme (cleaving RNA

CC with a YGY motif). The CD20-targeting nucleic acid is used to cleave RNA

CC of CD20 in the presence of a divalent cation that is preferably Mg<sup>2+</sup>.

CC Furthermore, it may be contacted with a cell to reduce CD20 activity of

CC the cell and treat a patient having a condition associated with the level

CC of CD20. The treatment may further comprise the use of one or more

CC therapies. In particular, the CD20 targeting nucleic acid may be used to

CC treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-

CC Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic

CC leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell

CC lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma,

CC immune thrombocytopaenia, and inflammatory arthropathy. The NOGO-

CC targeting nucleic acid is used to cleave RNA of the NOGO gene in the





CC chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS),  
CC Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob  
CC disease, muscular dystrophy, and/or other neurodegenerative disease  
CC states which respond to the modulation of NOGO expression. The present  
CC sequence is a hammerhead ribozyme of the invention  
XX  
SQ Sequence 17 BP; 0 A; 6 C; 3 G; 0 T; 8 U; 0 Other;  
  
Query Match 2.8%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 87.5%; Pred. No. 4e+02; 0; Mismatches 0; Gaps 0;  
Matches 14; Conservative 0; Indels 2; Indels 0; Gaps 0;  
  
QY 363 GCCGACGAGGAGGAA 378  
DB 17 GCAGCAGGAGGAGCAA 2  
  
RESULT 435  
ABL46698/c  
ID ABL46698 standard; RNA; 17 BP.  
XX  
AC ABL46698;  
XX  
DT 27-JUN-2003 (first entry)  
XX  
DE Human GRID NCH ribozyme substrate oligonucleotide #152.  
XX  
XX Human; Grb2-related with Insert Domain; GRID; T-cell;  
KW co-stimulatory adaptor protein; tissue rejection; graft rejection;  
KW leukaemia; cytostatic; ss.  
XX  
OS Homo sapiens.  
XX  
FN WO200162911-A2.  
XX  
PD 30-AUG-2001.  
XX  
PF 23-FEB-2001; 2001WO-US005957.  
XX  
PR 24-FEB-2000; 2000US-0184594P.  
XX  
PA (RIBO-) RIBOZYME PHARM INC.  
PA (GLAX ) GLAXO GROUP LTD.  
XX  
PI Jarvis T, Von Carlowitz I, Mcswiggen JA, Hamblin PA, Ellis JH;  
XX  
DR WPI; 2001-550088/61.  
XX  
PT New nucleic acid(s) for regulating the Grb2-related with Insert Domain  
PT (GRID) gene comprises using antisense and enzymatic nucleic acid  
PT molecules such as hammerhead ribozymes.  
XX  
PS Claim 4; Page 65; 108pp; English.  
XX  
CC The present invention relates to oligonucleotides that downregulate the  
CC expression of human Grb2-related with Insert Domain (GRID) gene. GRID is  
CC a T-cell co-stimulatory adaptor protein. The oligonucleotides are useful  
CC for modulating the expression of GRID, to treat conditions such as  
CC tissue/graft rejection and leukaemia. The oligonucleotides can also be  
CC administered in conjunction with other therapies such as radiation,  
CC chemotherapy and cyclosporin treatment. The present oligonucleotide was  
CC used to illustrate the invention  
XX  
SQ Sequence 17 BP; 3 A; 4 C; 9 G; 0 T; 1 U; 0 Other;  
  
Query Match 2.8%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 87.5%; Pred. No. 4e+02; 0; Mismatches 0; Gaps 0;  
Matches 14; Conservative 0; Indels 2; Indels 0; Gaps 0;  
  
QY 200 CCTCCCGGGGACCTGC 215  
DB 16 CCTCCCTGGGACCTCC 1

RESULT 436  
ABV85745/c  
ID ABV85745 standard; DNA; 17 BP.  
XX  
AC ABV85745;  
XX  
DT 11-DEC-2002 (first entry)  
XX  
DE Human pp-GaNTase 10 scanning 17-mer SEQ ID NO:738.  
XX  
KW Human; UDP-GalNAC:polypeptide N-acetylglactosaminyltransferase 10;  
KW pp-GaNTase 10; EC 2.4.1.41; chromosome 7q11.2; gene therapy; scanning;  
KW ss.  
XX  
OS Homo sapiens.  
OS Synthetic.  
XX  
FN EP1243660-A2.  
XX  
PD 25-SEP-2002.  
XX  
PF 25-JAN-2002; 2002EP-00001161.  
XX  
PR 30-JAN-2001; 2001WO-US000663.  
PR 30-JAN-2001; 2001WO-US000664.  
PR 30-JAN-2001; 2001WO-US000665.  
PR 30-JAN-2001; 2001WO-US000666.  
PR 30-JAN-2001; 2001WO-US000667.  
PR 30-JAN-2001; 2001WO-US000668.  
PR 30-JAN-2001; 2001WO-US000669.  
PR 30-JAN-2001; 2001WO-US000670.  
PR 23-MAY-2001; 2001US-00864761.  
PR 30-AUG-2001; 2001US-0315984P.  
XX  
PA (AEOM-) AEOMICA INC.  
XX  
PI Zhang J, Gu Y, Nguyen C;  
XX  
DR WPI; 2002-724954/79.  
XX  
PT Nucleic acid encoding human UDP-GalNAC:polypeptide N-  
PT cetylglactosaminyltransferase 10 protein is useful to diagnose, prevent  
PT and treat disorders associated with reduced or over expression of the  
PT encoded protein.  
XX  
PS Example 2; SEQ ID NO 738; 59pp; English.  
XX  
CC The present invention describes an isolated nucleic acid (I) encoding a  
CC human UDP-GalNAC:polypeptide N-acetylglactosaminyltransferase 10 (pp-  
CC GaNTase 10, EC 2.4.1.41) protein. Human pp-GaNTase 10 is located to  
CC chromosome 7q11.2. (I) can be used in gene therapy. Molecules of the  
CC present invention can be used in therapy, particularly to prevent or  
CC treat a disorder associated with decreased expression or activity of pp-  
CC GaNTase. The sequences given in ABV85011 to ABV8689 and ABP53502 to  
CC ABP53504 are given in the exemplification of the present invention. N.B.  
CC The sequence data for this patent is not represented in the printed  
CC specification but is based on sequence information supplied by the  
CC European Patent Office  
XX  
SQ Sequence 17 BP; 3 A; 6 C; 6 G; 2 T; 0 U; 0 Other;  
  
Query Match 2.8%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 87.5%; Pred. No. 4e+02; 0; Mismatches 0; Gaps 0;  
Matches 14; Conservative 0; Indels 2; Indels 0; Gaps 0;  
  
QY 343 GCGAGGTTACGGCCTT 358  
DB 17 GCGGATTCAGGCCTT 2



Qy 410 CTGAGCTGTGGGACGT 425  
|||||||  
Db 1 CTGAGCTGAGGCGT 16

RESULT 439  
ABK25392/c  
ID ABK25392 standard; DNA; 17 BP.  
XX AC ABK25392;  
XX DT 09-APR-2002 (first entry)  
XX DE Male-sterile plant producing genome altering oligonucleotide #292.  
XX

Chromosomal genomic alteration; genome altering oligonucleotide; PCR; ss;  
o-methyl modification; DNA modification; phosphorothioate linkage;  
DNA repair; DNA alteration; environmental tolerance; hygromycin-B;  
KB abiotic stress tolerance; improved nutritional value; hygromycin-B;  
KB amino acid over production; herbicide resistance; glyphosate resistance;  
KB imidazolinone herbicide resistance; herbicide resistance; glyphosate resistance;  
KB porphyrin herbicide resistance; triazine resistance; disease resistance;  
KB modified oil production; modified starch production; waxy starch;  
KB altered floral morphology; male-sterile plant; albino mutant;  
KB modified fatty acid content; reduced palmitate production; albino plant;  
KB increased stearate production; reduced linolenic acid production;  
KB photosynthetic process.

XX OS Zea mays.  
OS Synthetic.  
XX

PN WO200192512-A2.  
XX

PD 06-DEC-2001.  
XX

XX 01-JUN-2001; 2001WO-US017672.  
XX

PR 01-JUN-2000; 2000US-0208538P.  
PR 30-OCT-2000; 2000US-0244989P.  
PR 27-MAR-2001; 2001US-00818875.  
XX

PA (UYDE ) UNIV DELAWARE.  
XX

PI Kmtec EB, Gamper HB, Rice MC, Kim J;  
XX

DR WPI; 2002-106307/14.  
XX

PT New oligonucleotides with modified nuclease-resistant termini, useful for  
creating plants with desired phenotypes, e.g. stress tolerance, improved  
nutritional value, herbicide or disease resistance, or modified oil  
production.

XX Claim 7; Page 87; 220pp; English.

PS The invention relates to an oligonucleotide for targeted alteration of a  
genetic sequence, which comprises a single-stranded oligonucleotide  
having a DNA domain. The DNA domain has at least one mismatch with  
respect to the genetic sequence to be altered and further comprises  
chemical modifications of the oligonucleotide. The chemical modifications  
consist of o-methyl modification, an DNA modification, two or more  
phosphorothioate linkages on a terminus, or a combination of any two or  
more of these modifications. The oligonucleotides are useful for  
directing repair or alteration of plant genetic information. The  
oligonucleotides are particularly useful for creating plants with desired  
phenotypes, e.g. environmental or abiotic stress tolerance, improved  
nutritional value (e.g. altering amino acid content of plants or  
conferring amino acid over production), herbicide resistance (e.g.  
glyphosate resistance, imidazolinone and sulphonylurea herbicide  
resistance, porphyrin herbicide resistance or triazine resistance),  
disease resistance, modified oil production, modified starch production  
(e.g. increased starch or production of waxy starch), altered floral  
morphology (e.g. male-sterile plants) or modified fatty acid content  
(e.g. reduced palmitate, increased stearate or reduced linolenic acid).

CC The oligonucleotides are also useful for producing albino mutants for the  
analysis of photosynthetic processes. This sequence represents a genome  
altering oligonucleotide of the invention

XX

SQ Sequence 17 BP; 3 A; 7 C; 5 G; 2 T; 0 U; 0 Other;  
Query Match 2.8%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 87.5%; Pred. No. 4e+02;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
XX

Qy 410 CTGAGCTGTGGGACGT 425  
|||||||  
Db 17 CTGAGCTGAGGCGGT 2

RESULT 440  
ABK18192/c  
ID ABK18192 standard; RNA; 17 BP.  
XX AC ABK18192;  
XX DT 09-APR-2002 (first entry)  
XX DE Human ERG hammerhead ribozyme target sequence, Seq ID No 839.  
XX

Human ERG hammerhead ribozyme target sequence, Seq ID No 839.  
Human; hammerhead ribozyme; cytosolic; antitumor; antidiabetic;  
ophthalmological; antiarthritic; antipsoriatic; virucide; osteopathic;  
KB vulnery; cancer; lymphoma; Ewing's sarcoma; melanoma; psoriasis;  
KB tumour angiogenesis; diabetic retinopathy; macular degeneration;  
KB neovascular glaucoma; myopic degeneration; arthritis; verruca vulgaris;  
KB angiofibroma of tuberosus sclerosus; port-wine stain; wound healing;  
KB Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; leukaemia; ss;  
KB Osler-Weber-rendu syndrome, leukaemia; osteoporosis; DNAzyme; inozyme;  
KB amberzyme.

XX OS Homo sapiens.  
XX

PN WO200188124-A2.  
XX

PD 22-NOV-2001.  
XX

PF 16-MAY-2001; 2001WO-US015866.  
XX

PR 16-MAY-2000; 2000US-00572021.  
XX

PA (RIBO-) RIBOZYME PHARM INC.  
PA (GLAX ) GLAXO GROUP LTD.  
XX

PI Jarvis T, Von Carlowitz I, Mcswiggen JA, McLaughlin F, Randi AM;  
XX

DR WPI; 2002-082995/11.  
XX

PT Novel polynucleotide which down regulates expression of Ets-related gene,  
useful for treating cancer, diabetic retinopathy, macular degeneration,  
arthritis, psoriasis, verruca vulgaris and Sturge Weber syndrome.

XX Claim 4; Page 74; 149pp; English.

PS The invention relates to a nucleic acid molecule (I) which down regulates  
expression of an Ets-related gene (ERG). (I) is useful for treating  
conditions selected from cancer, lymphoma, Ewing's sarcoma, melanoma,  
tumour angiogenesis, diabetic retinopathy, macular degeneration,  
KB neovascular glaucoma, myopic degeneration, arthritis, psoriasis, verruca  
vulgaris, angiofibroma of tuberosus sclerosus, port-wine stains, Sturge  
Weber syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-rendu  
syndrome, leukaemia, osteoporosis and wound healing. (I) is useful for  
treating a patient having a condition associated with the level of ERG,  
by contacting cells of the patient with (I) under conditions suitable for  
the treatment. The method comprises the use of one or more therapies  
under conditions suitable for the treatment. Leukaemia or tumour  
angiogenesis is treated by administering (I) to the patient in  
conjunction with one or more of other therapies such as radiation or  
chemotherapy treatment. (I) is useful for reducing ERG activity in a

CC cell, by contacting the cell with (I). (I) is useful for cleaving RNA of  
CC ERG gene, by contacting (I) with RNA, in the presence of a divalent  
CC cation such as Mg<sup>2+</sup>. (I) is useful for diagnosis of conditions and  
CC diseases related to the expression of ERG, and as diagnostic tool to  
CC examine genetic drift and mutations within diseased cells or to detect  
CC the presence of ERG RNA in a cell. (I) is useful for specifically  
CC targeting genes that share homology with ERG gene or ERG fusion genes.  
CC ABK17354-ABK22719 represent nucleic acids, including antisense and  
CC enzymatic nucleic acid molecules which regulate expression of ERG, and  
CC related PCR primers of the invention  
XX  
SQ Sequence 17 BP; 2 A; 12 C; 3 G; 0 T; 0 U; 0 Other;  
  
Query Match 2.8%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 87.5%; Pred. No. 4e+02;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
Qy 7 CGGAGGGTGGCCTGG 22  
Db 16 CGGGGGGTGGGGCTGG 1  
  
RESULT 441  
ABK18191/C  
ID ABK18191 standard; RNA; 17 BP.  
XX AC  
XX AC  
XX AC  
DT 09-APR-2002 (first entry)  
XX  
DE Human ERG hammerhead ribozyme target sequence, Seq ID NO 838.  
XX  
KW Human; hammerhead ribozyme; cytostatic; antitumour; antidiabetic;  
KW ophthalmological; antiarthritic; antipsoriatic; virucide; osteopathic;  
KW vulvular; cancer; lymphoma; Ewing's sarcoma; melanoma; psoriasis;  
KW tumour angiogenesis; diabetic retinopathy; macular degeneration;  
KW neovascular glaucoma; myopic degeneration; arthritis; verruca vulgaris;  
KW angiofibroma of tuberosus sclerosis; port-wine stain; wound healing;  
KW Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; leukaemia; ss;  
KW Osler-Weber-tendu syndrome, leukaemia; osteoporosis; DNAzyme; inozyme;  
KW amberzyme.  
XX  
OS Homo sapiens.  
XX  
FN WO200188124-A2.  
XX  
XX 22-NOV-2001.  
XX  
PF 16-MAY-2001; 2001WO-US015866.  
XX  
XX 16-MAY-2000; 2000US-00572021.  
XX  
PA (RIBO-) RIBOZYME PHARM INC.  
PA (GLAX) GLAXO GROUP LTD.  
XX  
XX  
PI Jarvis T, Von Carlowitz I, Mcswiggen JA, McLaughlin F, Randi AM;  
XX  
XX WPI; 2002-082995/11.  
XX  
XX Novel polynucleotide which down regulates expression of Ets-related gene,  
XX useful for treating cancer, diabetic retinopathy, macular degeneration,  
XX arthritis, psoriasis, verruca vulgaris and Sturge Weber syndrome.  
XX  
XX Claim 4; Page 74; 149pp; English.  
XX  
XX The invention relates to a nucleic acid molecule (I) which down regulates  
XX expression of an Ets-related gene (ERG). (I) is useful for treating  
XX conditions selected from cancer, lymphoma, Ewing's sarcoma, melanoma,  
XX tumour angiogenesis, diabetic retinopathy, macular degeneration,  
XX neovascular glaucoma, myopic degeneration, arthritis, psoriasis, verruca  
XX vulgaris, angiofibroma of tuberosus sclerosis, port-wine stains, Sturge  
XX Weber syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-tendu  
XX syndrome, leukaemia, osteoporosis and wound healing. (I) is useful for

CC treating a patient having a condition associated with the level of ERG,  
CC by contacting cells of the patient with (I) under conditions suitable for  
CC the treatment. The method comprises the use of one or more therapies  
CC under conditions suitable for the treatment. Leukaemia or tumour  
CC angiogenesis is treated by administering (I) to the patient in  
CC conjunction with one or more of other therapies such as radiation or  
CC chemotherapy treatment. (I) is useful for reducing ERG activity in a  
CC cell, by contacting the cell with (I). (I) is useful for cleaving RNA of  
CC ERG gene, by contacting (I) with RNA, in the presence of a divalent  
CC cation such as Mg<sup>2+</sup>. (I) is useful for diagnosis of conditions and  
CC diseases related to the expression of ERG, and as diagnostic tool to  
CC examine genetic drift and mutations within diseased cells or to detect  
CC the presence of ERG RNA in a cell. (I) is useful for specifically  
CC targeting genes that share homology with ERG gene or ERG fusion genes.  
CC ABK17354-ABK22719 represent nucleic acids, including antisense and  
CC enzymatic nucleic acid molecules which regulate expression of ERG, and  
CC related PCR primers of the invention  
XX  
SQ Sequence 17 BP; 2 A; 12 C; 2 G; 0 T; 1 U; 0 Other;  
  
Query Match 2.8%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 87.5%; Pred. No. 4e+02;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
Qy 7 CGGAGGGTGGCCTGG 22  
Db 17 CGGGGGGTGGGGCTGG 2  
  
RESULT 442  
ABV90003  
ID ABV90003 standard; DNA; 17 BP.  
XX AC  
XX ABV90003;  
XX  
DT 23-DEC-2002 (first entry)  
XX  
DE Human POSHL1 scanning oligonucleotide SEQ ID NO 716.  
XX  
XX Human; POSHL 1; SH3 domain; POSH-like signalling protein 1; oncogene;  
KW Rho GTPase; signal transduction; gene expression; cancer; vaccine;  
KW gene therapy; transgenic; ss.  
XX  
XX Homo sapiens.  
XX  
XX EPI239051-A2.  
XX  
XX 11-SEP-2002.  
XX  
XX 28-JAN-2002; 2002EP-00001165.  
XX  
XX 30-JAN-2001; 2001WO-US000663.  
XX 30-JAN-2001; 2001WO-US000664.  
XX 30-JAN-2001; 2001WO-US000665.  
XX 30-JAN-2001; 2001WO-US000666.  
XX 30-JAN-2001; 2001WO-US000667.  
XX 30-JAN-2001; 2001WO-US000668.  
XX 30-JAN-2001; 2001WO-US000669.  
XX 23-MAY-2001; 2001WO-US000670.  
XX 23-MAY-2001; 2001US-00864761.  
XX 10-OCT-2001; 2001US-0328205P.  
XX  
XX (AEOM-) AEOMICA INC.  
XX  
XX Shannon M;  
XX  
XX WPI; 2002-684061/74.  
XX  
XX Novel human SH3 domain (POSH)-like signaling protein 1 polypeptide, POSHL  
XX -1, useful for treating disorders associated with decreased expression or  
XX activity of human POSHL1.  
XX  
XX Example 2; SEQ ID NO 716; 60pp + Sequence Listing; English.

XX The invention relates to an isolated SH3 domain (POSH)-like signalling  
CC protein 1 (POSHL 1) polypeptide (I), comprising a sequence of 730 amino  
CC acids (S1, ABB83999), a sequence having 65% sequence identity to (S1),  
CC (S1) having 95% deviations, especially conservative substitutions or a  
CC fragment of the sequences comprising at least 8 contiguous amino acids.  
CC Human POSHL 1 is a proto-oncogene/oncogene product that functions as an  
CC adaptor protein that interacts with Rho family small GTPases as well as  
CC downstream components of the signal transduction pathway. (I) is useful  
CC for identifying a specific binding partner. (I) and nucleic acids (II)  
CC encoding (I) are useful for diagnosing, monitoring disease and treating  
CC caused by altered expression of human POSHL1 including diagnosing and  
CC treating cancer, they useful in the development of vaccines and (II) is  
CC useful in gene therapy. (II) is useful for constructing microarrays which  
CC are useful for measuring and for surveying gene expression and creating  
CC transgenic non-human animals capable of producing the proteins. The  
CC present sequence is that of a scanning oligonucleotide useful in examples  
CC of the invention. Note: The present sequence did not form part of the  
CC printed specification, but is based on sequence information supplied to  
CC Derwent by the European Patent Office  
XX  
SQ Sequence 17 BP; 3 A; 6 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 2.8%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 87.5%; Pred. No. 4e+02;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 272 CTTCTCCGGAGGACCC 287  
Db 1 CTTCTCCGGAGACAGC 16

RESULT 443  
ABV90002  
ID ABV90002 standard; DNA; 17 BP.  
AC ABV90002;  
XX 23-DEC-2002 (first entry)  
DT Human POSHL1 scanning oligonucleotide SEQ ID NO 715.  
DE  
XX Human; POSHL 1; SH3 domain; POSH-like signalling protein 1; oncogene;  
KW Rho GTPase; signal transduction; gene expression; cancer; vaccine;  
KW gene therapy; transgenic; ss.  
XX Homo sapiens.  
OS  
XX EP1239051-A2.  
PN  
XX 11-SEP-2002.  
PD  
XX 28-JAN-2002; 2002EP-00001165.  
PF  
XX 30-JAN-2001; 2001WO-US0000663.  
PR 30-JAN-2001; 2001WO-US0000664.  
PR 30-JAN-2001; 2001WO-US0000665.  
PR 30-JAN-2001; 2001WO-US0000666.  
PR 30-JAN-2001; 2001WO-US0000667.  
PR 30-JAN-2001; 2001WO-US0000668.  
PR 30-JAN-2001; 2001WO-US0000669.  
PR 30-JAN-2001; 2001WO-US0000670.  
PR 23-MAY-2001; 2001US-00864761.  
PR 10-OCT-2001; 2001US-0328205P.  
XX  
XX (AEOM-) AEOMICA INC.  
PA  
XX Shannon M;  
XX WPI; 2002-684061/74.  
XX  
XX Novel human SH3 domain (POSH)-like signalling protein 1 polypeptide, POSHL  
PT -1, useful for treating disorders associated with decreased expression or

PT activity of human POSHL1.  
XX  
XX Example 2; SEQ ID NO 715; 60pp + Sequence Listing; English.  
XX  
CC The invention relates to an isolated SH3 domain (POSH)-like signalling  
CC protein 1 (POSHL 1) polypeptide (I), comprising a sequence of 730 amino  
CC acids (S1, ABB83999), a sequence having 65% sequence identity to (S1),  
CC (S1) having 95% deviations, especially conservative substitutions or a  
CC fragment of the sequences comprising at least 8 contiguous amino acids.  
CC Human POSHL 1 is a proto-oncogene/oncogene product that functions as an  
CC adaptor protein that interacts with Rho family small GTPases as well as  
CC downstream components of the signal transduction pathway. (I) is useful  
CC for identifying a specific binding partner. (I) and nucleic acids (II)  
CC encoding (I) are useful for diagnosing, monitoring disease and treating  
CC caused by altered expression of human POSHL1 including diagnosing and  
CC treating cancer, they useful in the development of vaccines and (II) is  
CC useful in gene therapy. (II) is useful for constructing microarrays which  
CC are useful for measuring and for surveying gene expression and creating  
CC transgenic non-human animals capable of producing the proteins. The  
CC present sequence is that of a scanning oligonucleotide useful in examples  
CC of the invention. Note: The present sequence did not form part of the  
CC printed specification, but is based on sequence information supplied to  
CC Derwent by the European Patent Office  
XX  
SQ Sequence 17 BP; 3 A; 7 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 2.8%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 87.5%; Pred. No. 4e+02;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 272 CTTCTCCGGAGGACCC 287  
Db 2 CTTCTCCGGAGACAGC 17

RESULT 444  
ABL31582/C  
ID ABL31582 standard; DNA; 17 BP.  
XX ABL31582;  
XX 21-MAR-2002 (first entry)  
DT Human HLA genotyping oligonucleotide SEQ ID NO 1071.  
DE  
XX Human; human leukocyte antigen; HLA; genotype; polymorphism;  
KW immunogenetic; transplantation; genetic disease; ss.  
XX Homo sapiens.  
OS  
XX WO200192572-A1.  
PN  
XX 06-DEC-2001.  
PD  
XX 01-JUN-2001; 2001WO-JP004662.  
PF  
XX 01-JUN-2000; 2000JP-00164798.  
PR (NISON ) NISSHINBO IND INC.  
PA (SYST-) SYSTEM RES INC.  
XX  
XX Inoko H, Kagiya T, Ichihara T, Matsumura Y, Moriya S, Nishida M;  
PI WPI; 2002-122074/16.  
DR  
XX Human leukocyte antigen (HLA) typing, useful for judging HLA genotypes of  
PT individuals e.g. by determining immunogenetic differences when  
PT transplanting between them.  
XX  
XX Claim 10; Page 296; 345pp; Japanese.  
XX  
XX The invention relates to a typing kit for judging human leukocyte antigen  
CC (HLA) genotype of a sample by hybridising a substrate on which 10-24 base



CC oligonucleotides (ABL30512-ABL31809) originating in the sequences of  
CC genes e.g. belonging to HLA class I antigens on human genome and  
CC containing gene polymorphisms as alloantigens have been immobilised as  
CC primers for amplification of cleaved nucleic acids relating to gene  
CC polymorphisms. The method is useful for judging HLA genotypes of  
CC individuals by determining immunogenetic differences before transplanting  
CC between them, providing genetic information to decide compatibility of  
CC organ and tissue for transplantation e.g. of bone marrow, kidney, liver,  
CC pancreas, Langerhans islet in pancreas and cornea, susceptibility  
CC diagnosis of genetic diseases and identifying individuals  
XX  
SQ Sequence 17 BP; 1 A; 6 C; 7 G; 3 T; 0 U; 0 Other;  
  
Query Match 2.8%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 87.5%; Pred. No. 4e+02;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
Qy 379 CGGAGCGAGTCCCGC 394  
Db 16 CGGAGCCAGTCCACGC 1  
  
RESULT 445  
ACN09761  
ID ACN09761 standard; RNA; 17 BP.  
XX  
AC ACN09761;  
XX  
DT 22-APR-2004 (first entry)  
XX  
DE WNV minus strand Inozyme substrate SEQ ID NO 9764.  
XX  
KW WNV; West Nile Virus; antiinflammatory; cytostatic; hepatotropic;  
KW virucide; neuroprotective; antibacterial; replication; pancreatitis;  
KW encephalitis; myocarditis; meningitis; infection; hepatitis;  
KW liver failure; cancer; cirrhosis; Hammerhead; Inozyme; DNAzyme;  
KW Amberzyme; Zinzyme; ss.  
XX  
OS West Nile Virus.  
XX  
PN WO200268637-A2.  
XX  
PD 06-SEP-2002.  
XX  
PF 19-OCT-2001; 2001WO-US048350.  
XX  
PR 20-OCT-2000; 2000US-0242411P.  
XX  
PA (RIBO-) RIBOZYME PHARM INC.  
PA (BLAT/) BLATT L.  
PA (MCSW/) MCSWIGGEN J A.  
XX  
PI Blatt L, Mcswiggen JA;  
XX  
DR WPI; 2002-706994/76.  
XX  
XX  
XX New nucleic acid molecule that modulates replication of West Nile Virus  
XX (WNV), useful for treating a condition related to WNV infection e.g.  
XX pancreatitis, meningitis, hepatocellular carcinoma or cirrhosis.  
XX  
XX Claim 23; SEQ ID NO 9764; 495pp; English.  
XX  
XX The invention relates to nucleic acid molecules that modulate replication  
XX of the West Nile Virus (WNV). The nucleic acid molecules are useful for  
XX treating a condition related to WNV infection e.g. pancreatitis,  
XX encephalitis, myocarditis, meningitis, neurologic infection, hepatitis,  
XX liver failure, hepatocellular carcinoma or cirrhosis. The nucleic acid  
XX molecule is selected from the group of ribozymes consisting of  
XX Hammerhead, Inozyme, G-cleaver, DNAzyme, Amberzyme and Zinzyme. The  
XX nucleic acid molecules further comprise at least five ribose residues, at  
XX least ten 2'-O-methyl modifications, phosphorothioate linkages on at  
XX least three of the 5' terminal nucleotides and a 3' end modification of a  
XX 3'-3', inverted abasic moiety. Nucleic acid molecules SEQ ID NO 1 to 37080  
XX are claimed; however, SEQ ID NO 9764 and 17502-17514 are not given  
XX in the specification. The present sequence is that of a nucleic acid  
XX molecule of the invention  
XX  
SQ Sequence 17 BP; 1 A; 5 C; 5 G; 0 T; 3 U; 0 Other;

CC are claimed; however, SEQ ID NO 2194-2206 and 17502-17514 are not given  
CC in the specification. The present sequence is that of a nucleic acid  
CC molecule of the invention  
XX  
SQ Sequence 17 BP; 2 A; 5 C; 5 G; 0 T; 5 U; 0 Other;  
  
Query Match 2.8%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 62.5%; Pred. No. 4e+02;  
Matches 10; Conservative 4; Mismatches 2; Indels 0; Gaps 0;  
  
Qy 316 TCAGCCGCGGTCTCT 331  
Db 1 UGAGCCGCGAGUCUCU 16  
  
RESULT 446  
ACN04592/C  
ID ACN04592 standard; RNA; 17 BP.  
XX  
AC ACN04592;  
XX  
DT 22-APR-2004 (first entry)  
XX  
DE WNV Zinzyme substrate SEQ ID NO 4595.  
XX  
KW WNV; West Nile Virus; antiinflammatory; cytostatic; hepatotropic;  
KW virucide; neuroprotective; antibacterial; replication; pancreatitis;  
KW encephalitis; myocarditis; meningitis; infection; hepatitis;  
KW liver failure; cancer; cirrhosis; Hammerhead; Inozyme; DNAzyme;  
KW Amberzyme; Zinzyme; ss.  
XX  
OS West Nile Virus.  
XX  
PN WO200268637-A2.  
XX  
PD 06-SEP-2002.  
XX  
PF 19-OCT-2001; 2001WO-US048350.  
XX  
PR 20-OCT-2000; 2000US-0242411P.  
XX  
PA (RIBO-) RIBOZYME PHARM INC.  
PA (BLAT/) BLATT L.  
PA (MCSW/) MCSWIGGEN J A.  
XX  
PI Blatt L, Mcswiggen JA;  
XX  
DR WPI; 2002-706994/76.  
XX  
XX  
XX New nucleic acid molecule that modulates replication of West Nile Virus  
XX (WNV), useful for treating a condition related to WNV infection e.g.  
XX pancreatitis, meningitis, hepatocellular carcinoma or cirrhosis.  
XX  
XX Claim 23; SEQ ID NO 4595; 495pp; English.  
XX  
XX The invention relates to nucleic acid molecules that modulate replication  
XX of the West Nile Virus (WNV). The nucleic acid molecules are useful for  
XX treating a condition related to WNV infection e.g. pancreatitis,  
XX encephalitis, myocarditis, meningitis, neurologic infection, hepatitis,  
XX liver failure, hepatocellular carcinoma or cirrhosis. The nucleic acid  
XX molecule is selected from the group of ribozymes consisting of  
XX Hammerhead, Inozyme, G-cleaver, DNAzyme, Amberzyme and Zinzyme. The  
XX nucleic acid molecules further comprise at least five ribose residues, at  
XX least ten 2'-O-methyl modifications, phosphorothioate linkages on at  
XX least three of the 5' terminal nucleotides and a 3' end modification of a  
XX 3'-3', inverted abasic moiety. Nucleic acid molecules SEQ ID NO 1 to 37080  
XX are claimed; however, SEQ ID NO 2194-2206 and 17502-17514 are not given  
XX in the specification. The present sequence is that of a nucleic acid  
XX molecule of the invention  
XX  
SQ Sequence 17 BP; 4 A; 5 C; 5 G; 0 T; 3 U; 0 Other;  
  
Query Match 2.8%; Score 12.8; DB 1; Length 17;

Best Local Similarity 87.5%; Pred. No. 4e+02; Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 316 TCAGCGCGGCTCTCT 331  
Db 16 TGAGCGCGGCTCTCT 1

## RESULT 447

ACN14999  
ID ACN14999 standard; RNA; 17 BP.

XX AC ACN14999;

XX 22-APR-2004 (first entry)

XX WNV minus strand Amberzyme substrate SEQ ID NO 15002.

XX WNV; West Nile Virus; antiinflammatory; cytostatic; hepatotropic;  
KW virucide; neuroprotective; antibacterial; replication; pancreatitis;  
KW encephalitis; myocarditis; meningitis; infection; hepatitis;  
KW liver failure; cancer; cirrhosis; Hammerhead; Inozyme; DNAzyme;  
KW Amberzyme; Zinzyme; ss.

XX West Nile Virus.

XX WO200268637-A2.

XX 06-SEP-2002.

XX 19-OCT-2001; 2001WO-US048350.

XX 20-OCT-2000; 2000US-0242411P.

XX (RIBO-) RIBOZYME PHARM INC.

PA (BLAT/) BLATT L.

PA (MCSW/) MCSWIGGEN J A.

XX Blatt L, Mcswiggen JA;

XX WPI; 2002-706994/76.

XX New nucleic acid molecule that modulates replication of West Nile Virus (WNV), useful for treating a condition related to WNV infection e.g. pancreatitis, meningitis, hepatocellular carcinoma or cirrhosis.

PS Claim 23; SEQ ID NO 15002; 495pp; English.

CC The invention relates to nucleic acid molecules that modulate replication of the West Nile Virus (WNV). The nucleic acid molecules are useful for treating a condition related to WNV infection e.g. pancreatitis, encephalitis, myocarditis, meningitis, neurologic infection, hepatitis, liver failure, hepatocellular carcinoma or cirrhosis. The nucleic acid molecule is selected from the group of ribozymes consisting of Hammerhead, Inozyme, G-cleaver, DNAzyme, Amberzyme and Zinzyme. The nucleic acid molecules further comprise at least five ribose residues, at least ten 2'-O-methyl modifications, phosphorothioate linkages on at least three of the 5' terminal nucleotides and a 3' end modification of a 3'-3' inverted abasic moiety. Nucleic acid molecules SEQ ID NO 1 to 37080 are claimed; however, SEQ ID NO 2194-2206 and 17502-17514 are not given in the specification. The present sequence is that of a nucleic acid molecule of the invention

SQ Sequence 17 BP; 2 A; 7 C; 2 G; 0 T; 6 U; 0 Other;

Query Match 2.8%; Score 12.8; DB 1; Length 17;

Best Local Similarity 56.2%; Pred. No. 4e+02; Matches 9; Conservative 2; Mismatches 2; Indels 0; Gaps 0;

QY 103 TCTCGCTGACTTTCAG 118

Db 2 UCUCUCAGACCUUCAG 17

## RESULT 448

ACN00415/C  
ID ACN00415 standard; RNA; 17 BP.

XX AC ACN00415;

XX 22-APR-2004 (first entry)

XX WNV Hammerhead Ribozyme substrate SEQ ID NO 405.

XX WNV; West Nile Virus; antiinflammatory; cytostatic; hepatotropic;  
KW virucide; neuroprotective; antibacterial; replication; pancreatitis;  
KW encephalitis; myocarditis; meningitis; infection; hepatitis;  
KW liver failure; cancer; cirrhosis; Hammerhead; Inozyme; DNAzyme;  
KW Amberzyme; Zinzyme; ss.

XX West Nile Virus.

XX WO200268637-A2.

XX 06-SEP-2002.

XX 19-OCT-2001; 2001WO-US048350.

XX 20-OCT-2000; 2000US-0242411P.

XX (RIBO-) RIBOZYME PHARM INC.

PA (BLAT/) BLATT L.

PA (MCSW/) MCSWIGGEN J A.

XX Blatt L, Mcswiggen JA;

XX WPI; 2002-706994/76.

XX New nucleic acid molecule that modulates replication of West Nile Virus (WNV), useful for treating a condition related to WNV infection e.g. pancreatitis, meningitis, hepatocellular carcinoma or cirrhosis.

PS Claim 23; SEQ ID NO 405; 495pp; English.

CC The invention relates to nucleic acid molecules that modulate replication of the West Nile Virus (WNV). The nucleic acid molecules are useful for treating a condition related to WNV infection e.g. pancreatitis, encephalitis, myocarditis, meningitis, neurologic infection, hepatitis, liver failure, hepatocellular carcinoma or cirrhosis. The nucleic acid molecule is selected from the group of ribozymes consisting of Hammerhead, Inozyme, G-cleaver, DNAzyme, Amberzyme and Zinzyme. The nucleic acid molecules further comprise at least five ribose residues, at least ten 2'-O-methyl modifications, phosphorothioate linkages on at least three of the 5' terminal nucleotides and a 3' end modification of a 3'-3' inverted abasic moiety. Nucleic acid molecules SEQ ID NO 1 to 37080 are claimed; however, SEQ ID NO 2194-2206 and 17502-17514 are not given in the specification. The present sequence is that of a nucleic acid molecule of the invention

SQ Sequence 17 BP; 6 A; 2 C; 7 G; 0 T; 2 U; 0 Other;

Query Match 2.8%; Score 12.8; DB 1; Length 17;

Best Local Similarity 87.5%; Pred. No. 4e+02; Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 103 TCTCGCTGACTTTCAG 118

Db 16 TCTCTGACCTTCAG 1

## RESULT 449

ACN03272/C

ID ACN03272 standard; RNA; 17 BP.

XX AC ACN03272;

XX

DT 22-APR-2004 (first entry)  
 XX WNV Inozyme substrate SEQ ID NO 3275.  
 DE  
 XX WNV; West Nile Virus; antiinflammatory; cytostatic; hepatotropic;  
 KW virucide; neuroprotective; antibacterial; replication; pancreatitis;  
 KW encephalitis; myocarditis; meningitis; infection; hepatitis;  
 KW liver failure; cancer; cirrhosis; Hammerhead; Inozyme; DNAzyme;  
 KW Amberzyme; Zinzyme; ss.  
 XX  
 OS West Nile Virus.  
 XX  
 XX WO200268637-A2.  
 PN  
 XX 06-SEP-2002.  
 PD  
 XX 19-OCT-2001; 2001WO-US048350.  
 PF  
 XX 20-OCT-2000; 2000US-0242411P.  
 PR  
 XX (RIBO-) RIBOZYME PHARM INC.  
 PA (BLAT/) BLATT L.  
 PA (MCSW/) MCSWIGGEN J A.  
 XX  
 PI Blatt L, Mcswiggen JA;  
 XX WPI; 2002-706994/76.  
 DR  
 XX New nucleic acid molecule that modulates replication of West Nile Virus  
 XX (WNV), useful for treating a condition related to WNV infection e.g.  
 PT pancreatitis, meningitis, hepatocellular carcinoma or cirrhosis.  
 PT  
 XX Claim 23; SEQ ID NO 3275; 495pp; English.  
 PS  
 XX The invention relates to nucleic acid molecules that modulate replication  
 CC of the West Nile Virus (WNV). The nucleic acid molecules are useful for  
 CC treating a condition related to WNV infection e.g. pancreatitis,  
 CC encephalitis, myocarditis, meningitis, neurologic infection, hepatitis,  
 CC liver failure, hepatocellular carcinoma or cirrhosis. The nucleic acid  
 CC molecule is selected from the group of ribozymes consisting of  
 CC Hammerhead, Inozyme, G-cleaver, DNAzyme, Amberzyme and Zinzyme. The  
 CC nucleic acid molecules further comprise at least five ribose residues, at  
 CC least ten 2'-O-methyl modifications, phosphorothioate linkages on at  
 CC least three of the 5' terminal nucleotides and a 3' end modification of a  
 CC 3'-3' inverted abasic moiety. Nucleic acid molecules SEQ ID NO 1 to 37080  
 CC are claimed; however, SEQ ID NO 2194-2206 and 17502-17514 are not given  
 CC in the specification. The present sequence is that of a nucleic acid  
 CC molecule of the invention  
 XX  
 SQ Sequence 17 BP; 5 A; 5 C; 5 G; 0 T; 2 U; 0 Other;  
 Query Match 2.8%; Score 12.8; DB 1; Length 17;  
 Best Local Similarity 87.5%; Pred. No. 4e+02;  
 Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 Qy 316 TCAGCCGCGGCTCTCT 331  
 Db 17 TGAGCCGCGAGGCTCT 2  
 RESULT 450  
 ACN14010  
 ID ACN14010 standard; RNA; 17 BP.  
 XX  
 XX ACN14010;  
 AC  
 XX 22-APR-2004 (first entry)  
 DT  
 XX WNV minus strand DNAzyme substrate SEQ ID NO 14013.  
 DE  
 XX WNV; West Nile Virus; antiinflammatory; cytostatic; hepatotropic;  
 KW virucide; neuroprotective; antibacterial; replication; pancreatitis;  
 KW encephalitis; myocarditis; meningitis; infection; hepatitis;

KW liver failure; cancer; cirrhosis; Hammerhead; Inozyme; DNAzyme;  
 KW Amberzyme; Zinzyme; ss.  
 XX  
 OS West Nile Virus.  
 XX  
 XX WO200268637-A2.  
 PN  
 XX 06-SEP-2002.  
 PD  
 XX 19-OCT-2001; 2001WO-US048350.  
 PF  
 XX 20-OCT-2000; 2000US-0242411P.  
 PR  
 XX (RIBO-) RIBOZYME PHARM INC.  
 PA (BLAT/) BLATT L.  
 PA (MCSW/) MCSWIGGEN J A.  
 XX  
 PI Blatt L, Mcswiggen JA;  
 XX WPI; 2002-706994/76.  
 DR  
 XX New nucleic acid molecule that modulates replication of West Nile Virus  
 XX (WNV), useful for treating a condition related to WNV infection e.g.  
 PT pancreatitis, meningitis, hepatocellular carcinoma or cirrhosis.  
 PT  
 XX Claim 23; SEQ ID NO 14013; 495pp; English.  
 PS  
 XX The invention relates to nucleic acid molecules that modulate replication  
 CC of the West Nile Virus (WNV). The nucleic acid molecules are useful for  
 CC treating a condition related to WNV infection e.g. pancreatitis,  
 CC encephalitis, myocarditis, meningitis, neurologic infection, hepatitis,  
 CC liver failure, hepatocellular carcinoma or cirrhosis. The nucleic acid  
 CC molecule is selected from the group of ribozymes consisting of  
 CC Hammerhead, Inozyme, G-cleaver, DNAzyme, Amberzyme and Zinzyme. The  
 CC nucleic acid molecules further comprise at least five ribose residues, at  
 CC least ten 2'-O-methyl modifications, phosphorothioate linkages on at  
 CC least three of the 5' terminal nucleotides and a 3' end modification of a  
 CC 3'-3' inverted abasic moiety. Nucleic acid molecules SEQ ID NO 1 to 37080  
 CC are claimed; however, SEQ ID NO 2194-2206 and 17502-17514 are not given  
 CC in the specification. The present sequence is that of a nucleic acid  
 CC molecule of the invention  
 XX  
 SQ Sequence 17 BP; 2 A; 6 C; 3 G; 0 T; 6 U; 0 Other;  
 Query Match 2.8%; Score 12.8; DB 1; Length 17;  
 Best Local Similarity 56.2%; Pred. No. 4e+02;  
 Matches 9; Conservative 5; Mismatches 2; Indels 0; Gaps 0;  
 Qy 103 TCCTGCTGACTTTCAG 118  
 Db 1 UCUCUCUGACCUUCAG 16  
 RESULT 451  
 ADA99826  
 ID ADA99826 standard; DNA; 17 BP.  
 XX  
 XX ADA99826;  
 AC  
 XX 20-NOV-2003 (first entry)  
 DT  
 XX Human MD23 scanning oligonucleotide SEQ ID 815.  
 DE  
 XX Cytostatic; immunostimulant; gene therapy; vaccine; human;  
 KW zinc finger protein; MD23; MD24; MD27; MD212; chromosome 7q22.1;  
 KW chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer;  
 KW developmental disorder; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX EPI281758-A2.  
 PN  
 XX 05-FEB-2003.  
 PD

```
XX PF 30-JUL-2002; 2002EP-00016874.
XX XX
XX PR 02-AUG-2001; 2001US-00922181.
XX XX
XX PA (AEOM-) AEOMICA INC.
XX XX
XX PI Shannon M, Gu Y, Nguyen C;
XX XX
XX DR WPI; 2003-423107/40.
XX XX
XX PT New zinc finger-containing proteins and nucleic acids, useful in
XX PT manufacturing a medicament for treating or preventing a disorder
XX PT associated with decreased or increased expression or activity of MD23,
XX PT MD24, MD27 or MD212, e.g. cancer.
XX XX
XX PS Example 8; SEQ ID NO 815; 103pp; English.
XX XX
XX CC The present invention relates to novel human zinc finger-containing
XX CC proteins and their coding sequences: MD23, MD24, MD27, MD212. MD23 is
XX CC encoded at chromosome 7q22.1, MD24 is encoded at chromosome 6p21.3-22.2,
XX CC MD27 is encoded at chromosome 16p11.2 and MD212 is encoded at chromosome
XX CC 15q26.1. The MD23, MD24, MD27, and MD212 sequences are useful in therapy,
XX CC or in manufacturing a medicament for treating or preventing a disorder,
XX CC associated with decreased or increased expression or activity of MD23,
XX CC MD24, MD27, or MD212, e.g. cancer or developmental disorders. The nucleic
XX CC acids and proteins are also useful for diagnosing or monitoring a disease
XX CC caused by altered expression of MD23, MD24, MD27, or MD212. The nucleic
XX CC acids can also be used as probes to detect and characterize gross
XX CC alterations in MD23, MD24, MD27, or MD212 genetic locus. The probes are
XX CC useful in constructing microarrays for measuring gene expression. The
XX CC proteins are useful as therapeutic agents for gene therapy or as
XX CC vaccines. The present sequence was used to illustrate the invention.
XX XX
XX SQ Sequence 17 BP; 2 A; 2 C; 8 G; 5 T; 0 U; 0 Other;
XX XX
XX Query Match 2.8%; Score 12.8; DB 1; Length 17;
XX Best Local Similarity 87.5%; Pred. No. 4e+02; Mismatches 0; Gaps 0;
XX Matches 14; Conservative 0; Indels 2; Indels 0; Gaps 0;
XX
QY 25 GGGGTGGTGGCCATT 40
DB 1 GGGGTGGGCGCCATT 16
XX
RESULT 452
ADA99824
ID ADA99824 standard; DNA; 17 BP.
XX
XX AC ADA99824;
XX
XX DT 20-NOV-2003 (first entry)
XX
XX DE Human MD23 scanning oligonucleotide SEQ ID 813.
XX
XX KW Cytostatic; immunostimulant; gene therapy; vaccine; human;
XX KW zinc finger protein; MD23; MD24; MD27; MD212; chromosome 7q22.1;
XX KW chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer;
XX KW developmental disorder; ss.
XX
XX OS Homo sapiens.
XX
XX PN EP1281758-A2.
XX
XX PD 05-FEB-2003.
XX
XX PF 30-JUL-2002; 2002EP-00016874.
XX
XX PR 02-AUG-2001; 2001US-00922181.
XX
XX PA (AEOM-) AEOMICA INC.
XX
XX PI Shannon M, Gu Y, Nguyen C;
XX
XX WPI; 2003-423107/40.
XX
XX PT New zinc finger-containing proteins and nucleic acids, useful in
XX PT manufacturing a medicament for treating or preventing a disorder
XX PT associated with decreased or increased expression or activity of MD23,
XX PT MD24, MD27 or MD212, e.g. cancer.
XX XX
XX PS Example 8; SEQ ID NO 815; 103pp; English.
XX XX
XX CC The present invention relates to novel human zinc finger-containing
XX CC proteins and their coding sequences: MD23, MD24, MD27, MD212. MD23 is
XX CC encoded at chromosome 7q22.1, MD24 is encoded at chromosome 6p21.3-22.2,
XX CC MD27 is encoded at chromosome 16p11.2 and MD212 is encoded at chromosome
XX CC 15q26.1. The MD23, MD24, MD27, and MD212 sequences are useful in therapy,
XX CC or in manufacturing a medicament for treating or preventing a disorder,
XX CC associated with decreased or increased expression or activity of MD23,
XX CC MD24, MD27, or MD212, e.g. cancer or developmental disorders. The nucleic
XX CC acids and proteins are also useful for diagnosing or monitoring a disease
XX CC caused by altered expression of MD23, MD24, MD27, or MD212. The nucleic
XX CC acids can also be used as probes to detect and characterize gross
XX CC alterations in MD23, MD24, MD27, or MD212 genetic locus. The probes are
XX CC useful in constructing microarrays for measuring gene expression. The
XX CC proteins are useful as therapeutic agents for gene therapy or as
XX CC vaccines. The present sequence was used to illustrate the invention.
XX XX
XX SQ Sequence 17 BP; 2 A; 2 C; 8 G; 5 T; 0 U; 0 Other;
XX XX
XX Query Match 2.8%; Score 12.8; DB 1; Length 17;
XX Best Local Similarity 87.5%; Pred. No. 4e+02; Mismatches 0; Gaps 0;
XX Matches 14; Conservative 0; Indels 2; Indels 0; Gaps 0;
XX
QY 24 AGGGGTGGTGGCCATT 39
DB 2 AGGGGTGGGCGCCATT 17
XX
RESULT 453
ABZ62075/C
ID ABZ62075 standard; RNA; 17 BP.
XX
XX AC ABZ62075;
XX
XX DT 21-MAR-2003 (first entry)
XX
XX DE Human H-Ras DNzyme target #866.
XX
XX KW Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;
XX KW enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV;
XX KW anti-rheumatic; cancer; AIDS; ss.
XX
XX OS Homo sapiens.
XX
XX PN WO200297114-A2.
XX
XX PD 05-DEC-2002.
XX
XX PF 29-MAY-2002; 2002WO-US016840.
XX
XX PR 29-MAY-2001; 2001US-0294140P.
XX PR 06-JUN-2001; 2001US-0296249P.
XX PR 10-SEP-2001; 2001US-0318471P.
XX
XX PA (RIBO-) RIBOZYME PHARM INC.
XX
XX PI Mcswiggen J;
XX
XX DR WPI; 2003-140484/13.
XX
XX PT Novel short interfering RNA and enzymatic nucleic acid useful for
XX PT treating cancer, modulates the expression of a nucleic acid encoding
XX PT HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.
XX
```

PS Claim 58; Page 129; 185pp; English.

CC The invention relates to a novel short interfering RNA (siRNA) nucleic acid molecule or an enzymatic nucleic acid molecule, that modulates expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras, human immunodeficiency virus (HIV) or a component of HIV. The nucleic acid molecule of the invention has cytostatic, anti-HIV, and anti-rheumatic activity. The nucleic acid molecules are useful for reducing HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are also useful for treating breast, ovarian, colorectal, lung, prostate, bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524, ABZ66530 - ABZ66585 represent substrate/target sequences for the human ribozymes of the invention

XX Sequence 17 BP; 3 A; 3 C; 8 G; 0 T; 3 U; 0 Other;

Query Match 2.8%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 87.5%; Pred. No. 4e+02; Mismatches 0; Gaps 0;  
Matches 14; Conservative 0; Indels 2; Indels 0; Gaps 0;

Qy 226 CTGCCCGAGCCCCCGAA 241  
| | | | | | | | | | | | | | | | | |  
Db 17 CTGCCCGAGCCCCCGTAA 2

RESULT 454  
ABZ65412/c

ID ABZ65412 standard; RNA; 17 BP.

XX ABZ65412;

XX 21-MAR-2003 (first entry)

XX Human HER2 DNazyme substrate #869.

XX Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras; enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV; anti-rheumatic; cancer; AIDS; ss.

XX Homo sapiens.

XX WO200297114-A2.

XX 05-DEC-2002.

XX 29-MAY-2002; 2002WO-US016840.

XX 29-MAY-2001; 2001US-0294140P.

PR 06-JUN-2001; 2001US-0296249P.

PR 10-SEP-2001; 2001US-0318471P.

XX (RIBO-) RIBOZYME PHARM INC.

XX Mcswiggen J;

XX WPI; 2003-140484/13.

XX Novel short interfering RNA and enzymatic nucleic acid useful for treating cancer, modulates the expression of a nucleic acid encoding HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.

XX Claim 4; Page 149; 185pp; English.

XX The invention relates to a novel short interfering RNA (siRNA) nucleic acid molecule or an enzymatic nucleic acid molecule, that modulates expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras, human immunodeficiency virus (HIV) or a component of HIV. The nucleic acid molecule of the invention has cytostatic, anti-HIV, and anti-rheumatic activity. The nucleic acid molecules are useful for reducing HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are also useful for treating breast, ovarian, colorectal, lung, prostate, bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences

CC shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524, ABZ66530 - ABZ66585 represent substrate/target sequences for the human ribozymes of the invention

XX Sequence 17 BP; 2 A; 11 C; 1 G; 0 T; 3 U; 0 Other;

Query Match 2.8%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 87.5%; Pred. No. 4e+02; Mismatches 0; Gaps 0;  
Matches 14; Conservative 0; Indels 2; Indels 0; Gaps 0;

Qy 6 GCGAGGGGTGGGCTG 21  
| | | | | | | | | | | | | | | | | |  
Db 17 GAGAGGGGTGGGCTG 2

RESULT 455  
ABZ61267/c

ID ABZ61267 standard; RNA; 17 BP.

XX ABZ61267;

XX 21-MAR-2003 (first entry)

XX Human H-Ras DNazyme target #58.

XX Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras; enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV; anti-rheumatic; cancer; AIDS; ss.

XX Homo sapiens.

XX WO200297114-A2.

XX 05-DEC-2002.

XX 29-MAY-2002; 2002WO-US016840.

XX 29-MAY-2001; 2001US-0294140P.

PR 06-JUN-2001; 2001US-0296249P.

PR 10-SEP-2001; 2001US-0318471P.

XX (RIBO-) RIBOZYME PHARM INC.

XX Mcswiggen J;

XX WPI; 2003-140484/13.

XX Novel short interfering RNA and enzymatic nucleic acid useful for treating cancer, modulates the expression of a nucleic acid encoding HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.

XX Claim 58; Page 112; 185pp; English.

XX The invention relates to a novel short interfering RNA (siRNA) nucleic acid molecule or an enzymatic nucleic acid molecule, that modulates expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras, human immunodeficiency virus (HIV) or a component of HIV. The nucleic acid molecule of the invention has cytostatic, anti-HIV, and anti-rheumatic activity. The nucleic acid molecules are useful for reducing HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are also useful for treating breast, ovarian, colorectal, lung, prostate, bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524, ABZ66530 - ABZ66585 represent substrate/target sequences for the human ribozymes of the invention

XX Sequence 17 BP; 1 A; 10 C; 5 G; 0 T; 1 U; 0 Other;

Query Match 2.8%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 87.5%; Pred. No. 4e+02; Mismatches 0; Gaps 0;  
Matches 14; Conservative 0; Indels 2; Indels 0; Gaps 0;

Qy 254 GCCCGGGTGGCGCGG 269

Db 16 GCCGCGTGGCGCGG 1  
RESULT 456  
ABZ64563/c  
ID ABZ64563 standard; RNA; 17 BP.  
XX  
AC ABZ64563;  
XX  
DT 21-MAR-2003 (first entry)  
XX  
DE Human HER2 DNzyme substrate #20.  
XX  
KW Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;  
KW enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytosstatic; anti-HIV;  
KW anti-rheumatic; cancer; AIDS; ss.  
XX  
OS Homo sapiens.  
XX  
FN WO200297114-A2.  
XX  
PD 05-DEC-2002.  
XX  
PF 29-MAY-2002; 2002WO-US016840.  
XX  
PR 29-MAY-2001; 2001US-0294140P.  
PR 06-JUN-2001; 2001US-0296249P.  
PR 10-SEP-2001; 2001US-0318471P.  
XX  
PA (RIBO-) RIBOZYME PHARM INC.  
XX  
PI Mcswiggen J;  
XX  
DR WPI; 2003-140484/13.  
XX  
PT Novel short interfering RNA and enzymatic nucleic acid useful for  
PT treating cancer, modulates the expression of a nucleic acid encoding  
PT HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.  
XX  
PS Claim 4; Page 133; 185pp; English.  
XX  
CC The invention relates to a novel short interfering RNA (siRNA) nucleic  
CC acid molecule or an enzymatic nucleic acid molecule, that modulates  
CC expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras,  
CC human immunodeficiency virus (HIV) or a component of HIV. The nucleic  
CC acid molecule of the invention has cytosstatic, anti-HIV, and anti-  
CC rheumatic activity. The nucleic acid molecules are useful for reducing  
CC HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are  
CC also useful for treating breast, ovarian, colorectal, lung, prostate,  
CC bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences  
CC shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524,  
CC ABZ66530 - ABZ66585 represent substrate/target sequences for the human  
CC ribozymes of the invention  
XX  
SQ Sequence 17 BP; 1 A; 12 C; 3 G; 0 T; 1 U; 0 Other;  
Query Match 2.8%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 87.5%; Pred. No. 4e+02;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 21 GCGAGGGGTGGTGCC 36  
Db 17 GCGAGGGGTGGTGCC 2  
RESULT 457  
ABZ61388  
ID ABZ61388 standard; RNA; 17 BP.  
XX  
AC ABZ61388;  
XX  
DT 21-MAR-2003 (first entry)

XX Human H-Ras DNzyme target #179.  
DE  
XX  
KW Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;  
KW enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytosstatic; anti-HIV;  
KW anti-rheumatic; cancer; AIDS; ss.  
XX  
OS Homo sapiens.  
XX  
FN WO200297114-A2.  
XX  
PD 05-DEC-2002.  
XX  
PF 29-MAY-2002; 2002WO-US016840.  
XX  
PR 29-MAY-2001; 2001US-0294140P.  
PR 06-JUN-2001; 2001US-0296249P.  
PR 10-SEP-2001; 2001US-0318471P.  
XX  
PA (RIBO-) RIBOZYME PHARM INC.  
XX  
PI Mcswiggen J;  
XX  
DR WPI; 2003-140484/13.  
XX  
PT Novel short interfering RNA and enzymatic nucleic acid useful for  
PT treating cancer, modulates the expression of a nucleic acid encoding  
PT HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.  
XX  
PS Claim 58; Page 114; 185pp; English.  
XX  
CC The invention relates to a novel short interfering RNA (siRNA) nucleic  
CC acid molecule or an enzymatic nucleic acid molecule, that modulates  
CC expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras,  
CC human immunodeficiency virus (HIV) or a component of HIV. The nucleic  
CC acid molecule of the invention has cytosstatic, anti-HIV, and anti-  
CC rheumatic activity. The nucleic acid molecules are useful for reducing  
CC HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are  
CC also useful for treating breast, ovarian, colorectal, lung, prostate,  
CC bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences  
CC shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524,  
CC ABZ66530 - ABZ66585 represent substrate/target sequences for the human  
CC ribozymes of the invention  
XX  
SQ Sequence 17 BP; 0 A; 6 C; 8 G; 0 T; 3 U; 0 Other;  
Query Match 2.8%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 75.0%; Pred. No. 4e+02;  
Matches 12; Conservative 2; Mismatches 2; Indels 0; Gaps 0;  
QY 202 TCCCGGGGACCTGCGG 217  
Db 1 UCCUGGGGCGGCGG 16  
RESULT 458  
ACD59623  
ID ACD59623 standard; RNA; 17 BP.  
XX  
AC ACD59623;  
XX  
DT 24-SEP-2003 (first entry)  
XX  
DE HCV DNzyme substrate sequence #1425.  
XX  
KW Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;  
KW RNA stability; RNA expression; RNA synthesis; antisense;  
KW enzymatic nucleic acid; hammerhead ribozyme; DNzyme; zinzyme;  
KW ambzyme; G-cleaver ribozyme; decoy molecule; aptamer;  
KW HBV reverse transcriptase; Enhancer I region; viral replication;  
KW degenerative; disease state; HBV infection; HCV infection; cirrhosis;  
KW liver failure; hepatocellular carcinoma; hepatotropic; cytosstatic;  
KW virucide; antiinflammatory; substrate; ss.

XX OS Hepatitis C virus.  
 XX PN WO200281494-A1.  
 XX PD 17-OCT-2002.  
 XX PF 26-MAR-2002; 2002WO-US009187.  
 XX PR 26-MAR-2001; 2001US-00817879.  
 XX PR 08-JUN-2001; 2001US-00877478.  
 XX PR 08-JUN-2001; 2001US-0296876P.  
 XX PR 24-OCT-2001; 2001US-0335059P.  
 XX PR 05-DEC-2001; 2001US-0337055P.  
 XX PA (RIBO-) RIBOZYME PHARM INC.  
 XX PA (BLAT/) BLATT L.  
 XX PA (MACE/) MACEJAK D.  
 XX PA (MCSW/) MCSWIGGEN J.  
 XX PA (MORR/) MORRISSEY D.  
 XX PA (PAVC/) PAVCO P.  
 XX PA (LEEP/) LEE P.  
 XX PA (DRAP/) DRAPER K.  
 XX PA (ROBE/) ROBERTS E.  
 XX PI Blatt L, Macejak D, Mcswiggen J, Morrissey J, Pavco P, Lee P;  
 XX PI Draper K, Roberts E;  
 XX DR WPI; 2003-229207/22.  
 XX PT Novel compound useful for treating cirrhosis, liver failure,  
 XX PT hepatocellular carcinoma, or condition associated with hepatitis C virus  
 XX PT infection.  
 XX PS Claim 1; Page 259; 387pp; English.  
 XX CC The present invention relates to nucleic acid molecules which modulate  
 XX CC the synthesis, expression and/or stability of Hepatitis C virus (HCV) or  
 XX CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense  
 XX CC and enzymatic nucleic acids such as hammerhead ribozymes, DNazymes,  
 XX CC inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed  
 XX CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse  
 XX CC transcriptase and/or HBV reverse transcriptase primer sequences, as well  
 XX CC as oligonucleotides that specifically bind the Enhancer I region of HBV  
 XX CC DNA. The nucleic acids may be used to modulate the expression of HBV  
 XX CC genes and HBV viral replication. Also disclosed is a method for screening  
 XX CC compounds and/or potential therapies directed against HBV, and compounds  
 XX CC that modulate the expression and/or replication of HCV. The compounds and  
 XX CC disease states related to HBV and HCV infection, replication and gene  
 XX CC expression such as cirrhosis, liver failure, and hepatocellular  
 XX CC carcinoma. The present sequence represents a substrate for one of the HCV  
 XX CC DNazyme or minus strand DNazyme sequences disclosed in the present  
 XX CC invention  
 XX SQ Sequence 17 BP; 1 A; 1 C; 11 G; 0 T; 4 U; 0 Other;  
 Query Match 2.8%; Score 12.8; DB 1; Length 17;  
 Best Local Similarity 75.0%; Pred. No. 4e+02;  
 Matches 12; Conservative 2; Mismatches 2; Indels 0; Gaps 0;  
 Qy 20 TGGAGGGGTGGTGGC 35  
 Db :||||| :|||  
 2 UGGAGGGGUGGUGGC 17  
 RESULT 459  
 ACD64287/C  
 ID ACD64287 standard; RNA; 17 BP.  
 XX AC ACD64287;  
 XX DT 30-SEP-2003 (first entry)

XX DE HCV minus strand DNazyme substrate sequence #1478.  
 XX KW Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;  
 KW RNA stability; RNA expression; RNA synthesis; antisense;  
 KW enzymatic nucleic acid; hammerhead ribozyme; DNazyme; inozyme; zinzyme;  
 KW amberzyme; G-cleaver ribozyme; decoy molecule; aptamer;  
 KW HBV reverse transcriptase; Enhancer I region; viral replication;  
 KW degenerative; disease state; HBV infection; HCV infection; cirrhosis;  
 KW liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;  
 KW virucide; antiinflammatory; substrate; ss.  
 OS Hepatitis C virus.  
 XX PN WO200281494-A1.  
 XX PD 17-OCT-2002.  
 XX PF 26-MAR-2002; 2002WO-US009187.  
 XX PR 26-MAR-2001; 2001US-00817879.  
 XX PR 08-JUN-2001; 2001US-00877478.  
 XX PR 08-JUN-2001; 2001US-0296876P.  
 XX PR 24-OCT-2001; 2001US-0335059P.  
 XX PR 05-DEC-2001; 2001US-0337055P.  
 XX PA (RIBO-) RIBOZYME PHARM INC.  
 XX PA (BLAT/) BLATT L.  
 XX PA (MACE/) MACEJAK D.  
 XX PA (MCSW/) MCSWIGGEN J.  
 XX PA (MORR/) MORRISSEY D.  
 XX PA (PAVC/) PAVCO P.  
 XX PA (LEEP/) LEE P.  
 XX PA (DRAP/) DRAPER K.  
 XX PA (ROBE/) ROBERTS E.  
 XX PI Blatt L, Macejak D, Mcswiggen J, Morrissey J, Pavco P, Lee P;  
 XX PI Draper K, Roberts E;  
 XX DR WPI; 2003-229207/22.  
 XX PT Novel compound useful for treating cirrhosis, liver failure,  
 XX PT hepatocellular carcinoma, or condition associated with hepatitis C virus  
 XX PT infection.  
 XX PS Claim 1; Page 301; 387pp; English.  
 XX CC The present invention relates to nucleic acid molecules which modulate  
 XX CC the synthesis, expression and/or stability of Hepatitis C virus (HCV) or  
 XX CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense  
 XX CC and enzymatic nucleic acids such as hammerhead ribozymes, DNazymes,  
 XX CC inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed  
 XX CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse  
 XX CC transcriptase and/or HBV reverse transcriptase primer sequences, as well  
 XX CC as oligonucleotides that specifically bind the Enhancer I region of HBV  
 XX CC DNA. The nucleic acids may be used to modulate the expression of HBV  
 XX CC genes and HBV viral replication. Also disclosed is a method for screening  
 XX CC compounds and/or potential therapies directed against HBV, and compounds  
 XX CC that modulate the expression and/or replication of HCV. The compounds and  
 XX CC disease states related to HBV and HCV infection, replication and gene  
 XX CC expression such as cirrhosis, liver failure, and hepatocellular  
 XX CC carcinoma. The present sequence represents a substrate for one of the HCV  
 XX CC DNazyme or minus strand DNazyme sequences disclosed in the present  
 XX CC invention  
 XX SQ Sequence 17 BP; 1 A; 6 C; 6 G; 0 T; 4 U; 0 Other;  
 Query Match 2.8%; Score 12.8; DB 1; Length 17;  
 Best Local Similarity 87.5%; Pred. No. 4e+02;  
 Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 433 GGACTCGGCTCACACA 448

Db 17 GGACTGGCCACACA 2  
||||| ||| |||||  
RESULT 460  
ACD64059/c  
ID ACD64059 standard; RNA; 17 BP.  
XX  
AC ACD64059;  
XX  
DT 30-SEP-2003 (first entry)  
XX  
DE HCV minus strand DNAzyme substrate sequence #1362.  
XX  
KW Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;  
KW RNA stability; RNA expression; RNA synthesis; antisense;  
KW enzymatic nucleic acid; hammerhead ribozyme; DNAzyme; inozyme; zinzyme;  
KW amberzyme; G-cleaver ribozyme; decoy molecule; aptamer;  
KW HBV reverse transcriptase; Enhancer I region; viral replication;  
KW degenerative; disease state; HBV infection; HCV infection; cirrhosis;  
KW liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;  
KW virucide; antiinflammatory; substrate; ss.  
XX  
OS Hepatitis C virus.  
XX  
FN WO200281494-A1.  
XX  
PD 17-OCT-2002.  
XX  
PF 26-MAR-2002; 2002WO-US009187.  
XX  
PR 26-MAR-2001; 2001US-00817879.  
PR 08-JUN-2001; 2001US-00877478.  
PR 08-JUN-2001; 2001US-0296876P.  
PR 24-OCT-2001; 2001US-0335059P.  
PR 05-DEC-2001; 2001US-0337055P.  
XX  
PA (RIBO-) RIBOZYME PHARM INC.  
PA (BLAT/) BLATT L.  
PA (MACE/) MACEJAK D.  
PA (MCSW/) MCSWIGGEN J.  
PA (MORR/) MORRISSEY D.  
PA (PAVC/) PAVCO P.  
PA (LEEP/) LEE P.  
PA (DRAP/) DRAPER K.  
PA (ROBE/) ROBERTS E.  
XX  
PI Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;  
PI Draper K, Roberts E;  
XX  
WPI; 2003-229207/22.  
XX  
PT Novel compound useful for treating cirrhosis, liver failure,  
PT hepatocellular carcinoma, or condition associated with hepatitis C virus  
PT infection.  
XX  
PS Claim 1; Page 299; 387pp; English.  
XX  
CC The present invention relates to nucleic acid molecules which modulate  
CC the synthesis, expression and/or stability of Hepatitis C virus (HCV) or  
CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense  
CC and enzymatic nucleic acids such as hammerhead ribozymes, DNazymes,  
CC inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed  
CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse  
CC transcriptase and/or HBV reverse transcriptase primer sequences, as well  
CC as oligonucleotides that specifically bind the Enhancer I region of HBV  
CC DNA. The nucleic acids may be used to modulate the expression of HBV  
CC genes and HBV viral replication. Also disclosed is a method for screening  
CC compounds and/or potential therapies directed against HBV and compounds  
CC that modulate the expression and/or replication of HCV. The compounds and  
CC methods of the invention are useful for the treatment of degenerative and  
CC disease states related to HBV and HCV infection, replication and gene  
CC expression such as cirrhosis, liver failure, and hepatocellular

CC carcinoma. The present sequence represents a substrate for one of the HCV  
CC DNAzyme or minus strand DNAzyme sequences disclosed in the present  
CC invention  
XX  
SQ Sequence 17 BP; 3 A; 6 C; 7 G; 0 T; 1 U; 0 Other;  
Query Match 2.8%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 87.5%; Pred. No. 4e+02; Mismatches 0; Gaps 0;  
Matches 14; Conservative 0; Indels 2;  
Qy 208 GGACCTGGCGGGTC 223  
Db 16 GCACCTGGCGGGCTC 1  
||||| |||||  
RESULT 461  
ACD52324/c  
ID ACD52324 standard; RNA; 17 BP.  
XX  
AC ACD52324;  
XX  
DT 24-SEP-2003 (first entry)  
XX  
DE HBV inozyme substrate sequence #352.  
XX  
KW Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;  
KW RNA stability; RNA expression; RNA synthesis; antisense;  
KW enzymatic nucleic acid; hammerhead ribozyme; DNAzyme; inozyme; zinzyme;  
KW amberzyme; G-cleaver ribozyme; decoy molecule; aptamer;  
KW HBV reverse transcriptase; Enhancer I region; viral replication;  
KW degenerative; disease state; HBV infection; HCV infection; cirrhosis;  
KW liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;  
KW virucide; antiinflammatory; substrate; ss.  
XX  
OS Hepatitis B virus.  
XX  
FN WO200281494-A1.  
XX  
PD 17-OCT-2002.  
XX  
PF 26-MAR-2002; 2002WO-US009187.  
XX  
PR 26-MAR-2001; 2001US-00817879.  
PR 08-JUN-2001; 2001US-00877478.  
PR 08-JUN-2001; 2001US-0296876P.  
PR 24-OCT-2001; 2001US-0335059P.  
PR 05-DEC-2001; 2001US-0337055P.  
XX  
PA (RIBO-) RIBOZYME PHARM INC.  
PA (BLAT/) BLATT L.  
PA (MACE/) MACEJAK D.  
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PA (LEEP/) LEE P.  
PA (DRAP/) DRAPER K.  
PA (ROBE/) ROBERTS E.  
XX  
PI Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;  
PI Draper K, Roberts E;  
XX  
WPI; 2003-229207/22.  
XX  
PT Novel compound useful for treating cirrhosis, liver failure,  
PT hepatocellular carcinoma, or condition associated with hepatitis C virus  
PT infection.  
XX  
PS Example 1; Page 156; 387pp; English.  
XX  
CC The present invention relates to nucleic acid molecules which modulate  
CC the synthesis, expression and/or stability of Hepatitis C virus (HCV) or  
CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense  
CC and enzymatic nucleic acids such as hammerhead ribozymes, DNazymes,  
CC inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed  
CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse  
CC transcriptase and/or HBV reverse transcriptase primer sequences, as well  
CC as oligonucleotides that specifically bind the Enhancer I region of HBV  
CC DNA. The nucleic acids may be used to modulate the expression of HBV  
CC genes and HBV viral replication. Also disclosed is a method for screening  
CC compounds and/or potential therapies directed against HBV and compounds  
CC that modulate the expression and/or replication of HCV. The compounds and  
CC methods of the invention are useful for the treatment of degenerative and  
CC disease states related to HBV and HCV infection, replication and gene  
CC expression such as cirrhosis, liver failure, and hepatocellular



CC inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed  
CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse  
CC transcriptase and/or HBV reverse transcriptase primer sequences, as well  
CC as oligonucleotides that specifically bind the Enhancer I region of HBV  
CC DNA. The nucleic acids may be used to modulate the expression of HBV  
CC genes and HBV viral replication. Also disclosed is a method for screening  
CC compounds and/or potential therapies directed against HBV, and compounds  
CC that modulate the expression and/or replication of HCV. The compounds and  
CC methods of the invention are useful for the treatment of degenerative and  
CC disease states related to HBV and HCV infection, replication and gene  
CC expression such as cirrhosis, liver failure, and hepatocellular  
CC carcinoma. The present sequence represents a substrate for one of the HBV  
CC ribozyme, inozyme, G-cleaver, zinzyme, DNAzyme or amberzyme sequences  
CC disclosed in the present invention

XX SQ Sequence 17 BP; 1 A; 8 C; 4 G; 0 T; 4 U; 0 Other;

Query Match 2.8%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 87.5%; Pred. No. 4e+02; Mismatches 0; Gaps 0;  
Matches 14; Conservative 0; Indels 2; Indels 0; Gaps 0;

Qy 117 AGCGGGCGGAAAGCC 132  
Db 16 AGCGGGCGGTAGACC 1  
|||||

RESULT 462  
ADFL3468/C  
ID ADF13468 standard; DNA; 17 BP.

XX AC ADF13468;

XX DT 12-FEB-2004 (first entry)

XX DE SNX9 (Sorting Nexin 9), BaySNP 6743, PCR primer #2.

XX KW Cardiant; antiarteriosclerotic; vasotropic; cerebroprotective;  
XX KW hypotensive; gene therapy; human; SNX9; Sorting Nexin 9; PCR; primer; ss.  
XX OS Homo sapiens.

XX PN WO2003072813-A2.

XX PD 04-SEP-2003.

XX PF 14-FEB-2003; 2003WO-EP001514.

XX PR 27-FEB-2002; 2002EP-00004258.

XX PA (FARB ) BAYER AG.

XX PI Stropp U, Schwars S, Kallabis H;

XX DR WPI; 2003-712738/67.

XX PT New isolated polynucleotide encoded by a phenotype-associated gene,  
XX PT useful for prognosticating statin therapy response, and diagnosing or  
XX PT treating cardiovascular diseases, such as hypertension, myocardial  
XX PT infarction and stroke.

XX FS Example 1; Page 69; 182pp; English.

XX CC The present invention relates to human phenotype-associated (PA) genes (I  
XX CC : ADF13307-ADP13386) which contain a Single Nucleotide Polymorphism  
XX CC (SNP). The SNP is given in the sequence as a variant nucleotide. Also  
XX CC claimed are methods for screening for agents which regulate the activity  
XX CC of a PA gene and reagents that modulate the activity of a PA polypeptide  
XX CC or a polynucleotide where the reagent is identified by the screening  
XX CC methods. The methods and compositions of the present invention are useful  
XX CC for prognosticating, diagnosing and treating cardiovascular diseases,  
XX CC such as atherosclerosis, hypertension, restenosis, arterial inflammation,  
XX CC myocardial infarction and stroke. The present sequence is a PCR primer,  
XX CC used in the examples from the invention.

XX SQ Sequence 17 BP; 1 A; 11 C; 2 G; 3 T; 0 U; 0 Other;

Query Match 2.8%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 87.5%; Pred. No. 4e+02; Mismatches 0; Gaps 0;  
Matches 14; Conservative 0; Indels 2; Indels 0; Gaps 0;

Qy 334 GGGCGGAGGGCGAGGT 349  
Db 16 GGGCGGAGGGCGAGGT 1  
|||||

RESULT 463  
ABZ96390/C  
ID ABZ96390 standard; DNA; 17 BP.

XX AC ABZ96390;

XX DT 17-OCT-2003 (first entry)

XX DE Human C/EBP antisense fragment no.2250.

XX KW Human; antisense; lung dysfunction; nasal airway dysfunction;  
XX KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
XX KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
XX KW antisense gene therapy; respiratory; lung; adenosine sensitivity;  
XX KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
XX KW lung inflammation; respiratory disease; ds.

XX OS Homo sapiens.

XX PN WO200285308-A2.

XX PD 31-OCT-2002.

XX PF 23-APR-2002; 2002WO-US013135.

XX PR 24-APR-2001; 2001US-0286137P.

XX PA (EPIG-) EPIGENESIS PHARM INC.

XX PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
XX PI Miller S, Tang L, Shahabuddin S;

XX DR WPI; 2003-229219/22.

XX PT Pharmaceutical composition for treating ailments associated with impaired  
XX PT respiration, has oligo(s) antisense to specific gene(s) or its  
XX PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
XX PT ubiquinone.

XX PS Disclosure; SEQ ID NO 11632; 872pp; English.

XX CC The invention relates to a novel pharmaceutical composition, which has a  
XX CC first active agent comprising an oligonucleotide antisense to the  
XX CC initiation codon, coding region, 5' or 3' end genomic flanking regions,  
XX CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
XX CC junctions of genes encoding a polypeptide associated with lung and/or  
XX CC nasal airway dysfunction and a second active agent comprising an  
XX CC antiinflammatory steroid and ubiquinone. A composition of the invention  
XX CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
XX CC immunosuppressive, and cytostatic activity. The composition may have a  
XX CC use in antisense gene therapy. The composition is useful for treating or  
XX CC preventing a respiratory, lung or malignant disease or condition, also  
XX CC for enhancing the prophylactic or therapeutic respiratory effect of an  
XX CC antiinflammatory steroid in a subject, for reducing or depleting levels  
XX CC of, or reducing sensitivity to adenosine, reducing levels of adenosine  
XX CC receptor, producing bronchodilation, increasing levels of ubiquinone or  
XX CC lung surfactant in a subject's tissue, or treating bronchoconstriction,  
XX CC lung inflammation, lung allergies, or a respiratory disease or condition.  
XX CC Note: The sequence data for this patent is not represented in the printed  
XX CC specification, but was obtained in electronic format directly from WIPO  
XX CC at ftp.wipo.int/pub/published\_pct\_sequences

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XX SQ Sequence 17 BP; 0 A; 12 C; 5 G; 0 T; 0 U; 0 Other;
Query Match 2.8%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 4e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 257 GCGGTGCGCGCGCGGC 272
Db 16 GCGGGCGCGCGCGGC 1

RESULT 464
ADL48687
ID ADL48687 standard; RNA; 17 BP.
XX
AC ADL48687;
XX
DT 20-MAY-2004 (first entry)
XX
DE Human IKK-gamma substrate sequence #1197.
XX
KW antisense oligonucleotide; neurite growth inhibitor; NOGO;
KW prostaglandin D2 receptor; PTGDR; IkappaB kinase; IKK;
KW protein kinase PKR; cerebrovascular accident;
KW central nervous system injury; CNS injury; spinal cord injury; cancer;
KW melanoma; lymphoma; glioma; inflammatory disease; rheumatoid arthritis;
KW restenosis; asthma; Crohn's disease; diabetes; obesity;
KW autoimmune disease; lupus; multiple sclerosis; transplant rejection;
KW graft rejection; ischaemia; reperfusion; glomerulonephritis; sepsis;
KW allergy; asthma; allergic rhinitis; atopic dermatitis; Human IKK-gamma;
KW substrate; ds.
XX
OS Unidentified.
XX
PN WO200281628-A2.
XX
PD 17-OCT-2002.
XX
PF 03-APR-2002; 2002WO-US010512.
XX
PR 05-APR-2001; 2001US-00827395.
PR 29-MAY-2001; 2001US-0294412P.
PR 28-AUG-2001; 2001US-0315315P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Blatt L, Chowrira B, Haerberli P, Mcswiggen J, Fosnaugh K;
XX
WPI; 2003-058513/05.
XX
PT Novel enzymatic nucleic acid that down-regulates expression of neurite
PT growth inhibitor receptor, prostaglandin D2 receptor, IkappaB kinase or
PT protein kinase PKR genes, for treating cancer and inflammatory disease.
XX
PS Claim 59; SEQ ID NO 2220; 317pp; English.
XX
CC The invention comprises nucleic acids (e.g. antisense oligonucleotides)
CC that down regulate the expression or inhibit the function of a receptor
CC for a neurite growth inhibitor, NOGO, prostaglandin D2 receptor (PTGDR),
CC IkappaB kinase (IKK), or protein kinase PKR. The nucleic acids of the
CC invention are useful for treating: cerebrovascular accident, central
CC nervous system (CNS) injury, spinal cord injury, cancer (e.g. melanoma,
CC lymphoma or glioma), inflammatory disease (e.g. rheumatoid arthritis,
CC restenosis or asthma), Crohn's disease, diabetes, obesity, autoimmune
CC disease, lupus, multiple sclerosis, transplant/graft rejection,
CC ischaemia/reperfusion injury, glomerulonephritis, sepsis, and allergic
CC conditions (e.g. asthma, allergic rhinitis or atopic dermatitis). The
CC nucleic acids of the invention are also useful for down-regulating the
CC expression of a target gene and as a diagnostic tool to examine genetic
CC drifts and mutations within diseased cells or to detect the presence of a
CC target RNA in a cell. The present RNA sequence represents a human IKK-
CC gamma substrate sequence.

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XX SQ Sequence 17 BP; 0 A; 6 C; 8 G; 0 T; 3 U; 0 Other;
Query Match 2.8%; Score 12.8; DB 1; Length 17;
Best Local Similarity 68.8%; Pred. No. 4e+02;
Matches 11; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

QY 182 GCTGCTGCGCGGTCG 197
||:|||||:|
Db 2 GCUGCGCGCGGTCG 17

RESULT 466
ADL51527/C
ID ADL51527 standard; RNA; 17 BP.
XX
AC ADL51527;
XX
DT 20-MAY-2004 (first entry)
XX
DE Human PTGDR substrate sequence #646.
XX
XX antisense oligonucleotide; neurite growth inhibitor; NOGO;
KW prostaglandin D2 receptor; PTGDR; IkappaB kinase; IKK;
KW protein kinase PKR; cerebrovascular accident;
KW central nervous system injury; CNS injury; spinal cord injury; cancer;
KW melanoma; lymphoma; glioma; inflammatory disease; rheumatoid arthritis;
KW restenosis; asthma; Crohn's disease; diabetes; obesity;
KW autoimmune disease; lupus; multiple sclerosis; transplant rejection;
KW graft rejection; ischaemia; reperfusion; glomerulonephritis; sepsis;
KW allergy; asthma; allergic rhinitis; atopic dermatitis; human PTGDR;
KW substrate; ds.
XX
OS Unidentified.
XX
XX WO200281628-A2.
XX
PD 17-OCT-2002.
XX
PF 03-APR-2002; 2002WO-US010512.
XX
PR 05-APR-2001; 2001US-00827395.
PR 29-MAY-2001; 2001US-0294412P.
PR 28-AUG-2001; 2001US-0315315P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Blatt L, Chowrira B, Haerberli P, Mcswiggen J, Fossnaugh K;
XX
DR WPI; 2003-058513/05.
XX
PT Novel enzymatic nucleic acid that down-regulates expression of neurite
PT growth inhibitor receptor, prostaglandin D2 receptor, IkappaB kinase or
PT protein kinase PKR genes, for treating cancer and inflammatory disease.
XX
PS Claim 161; SEQ ID NO 5060; 317pp; English.
XX
XX The invention comprises nucleic acids (e.g. antisense oligonucleotides)
XX that down regulate the expression or inhibit the function of a receptor
XX for a neurite growth inhibitor, NOGO, prostaglandin D2 receptor (PTGDR),
XX IkappaB kinase (IKK), or protein kinase PKR. The nucleic acids of the
XX invention are useful for treating: cerebrovascular accident, central
XX nervous system (CNS) injury, spinal cord injury, cancer (e.g. melanoma,
XX lymphoma or glioma), inflammatory disease (e.g. rheumatoid arthritis,
XX restenosis or asthma), Crohn's disease, diabetes, obesity, autoimmune
XX disease, lupus, multiple sclerosis, transplant/graft rejection,
XX ischaemia/reperfusion injury, glomerulonephritis, sepsis, and allergic
XX conditions (e.g. asthma, allergic rhinitis or atopic dermatitis). The
XX nucleic acids of the invention are also useful for down-regulating the
XX expression of a target gene and as a diagnostic tool to examine genetic
XX drifts and mutations within diseased cells or to detect the presence of a
XX target RNA in a cell. The present RNA sequence represents a human PKR
XX substrate sequence.
```

```
XX SQ Sequence 17 BP; 2 A; 7 C; 8 G; 0 T; 0 U; 0 Other;
Query Match 2.8%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 4e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 389 CCCCGCGCGCGCGCG 404
|:|||||:|
Db 16 CTCGCGCGCGGCTCG 1

RESULT 467
ADM09504
ID ADM09504 standard; RNA; 17 BP.
XX
AC ADM09504;
XX
DT 20-MAY-2004 (first entry)
XX
DE Human NOGO receptor amberzyme substrate sequence #59.
XX
XX antisense oligonucleotide; neurite growth inhibitor; NOGO;
KW prostaglandin D2 receptor; PTGDR; IkappaB kinase; IKK;
KW protein kinase PKR; cerebrovascular accident;
KW central nervous system injury; CNS injury; spinal cord injury; cancer;
KW melanoma; lymphoma; glioma; inflammatory disease; rheumatoid arthritis;
KW restenosis; asthma; Crohn's disease; diabetes; obesity;
KW autoimmune disease; lupus; multiple sclerosis; transplant rejection;
KW graft rejection; ischaemia; reperfusion; glomerulonephritis; sepsis;
KW allergy; asthma; allergic rhinitis; atopic dermatitis;
KW NOGO receptor amberzyme; substrate; ss.
XX
OS Unidentified.
XX
XX WO200281628-A2.
XX
PD 17-OCT-2002.
XX
PF 03-APR-2002; 2002WO-US010512.
XX
PR 05-APR-2001; 2001US-00827395.
PR 29-MAY-2001; 2001US-0294412P.
PR 28-AUG-2001; 2001US-0315315P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Blatt L, Chowrira B, Haerberli P, Mcswiggen J, Fossnaugh K;
XX
DR WPI; 2003-058513/05.
XX
PT Novel enzymatic nucleic acid that down-regulates expression of neurite
PT growth inhibitor receptor, prostaglandin D2 receptor, IkappaB kinase or
PT protein kinase PKR genes, for treating cancer and inflammatory disease.
XX
PS Claim 9; SEQ ID NO 899; 317pp; English.
XX
XX The invention comprises nucleic acids (e.g. antisense oligonucleotides)
XX that down regulate the expression or inhibit the function of a receptor
XX for a neurite growth inhibitor, NOGO, prostaglandin D2 receptor (PTGDR),
XX IkappaB kinase (IKK), or protein kinase PKR. The nucleic acids of the
XX invention are useful for treating: cerebrovascular accident, central
XX nervous system (CNS) injury, spinal cord injury, cancer (e.g. melanoma,
XX lymphoma or glioma), inflammatory disease (e.g. rheumatoid arthritis,
XX restenosis or asthma), Crohn's disease, diabetes, obesity, autoimmune
XX disease, lupus, multiple sclerosis, transplant/graft rejection,
XX ischaemia/reperfusion injury, glomerulonephritis, sepsis, and allergic
XX conditions (e.g. asthma, allergic rhinitis or atopic dermatitis). The
XX nucleic acids of the invention are also useful for down-regulating the
XX expression of a target gene and as a diagnostic tool to examine genetic
XX drifts and mutations within diseased cells or to detect the presence of a
XX target RNA in a cell. The present RNA sequence represents a human NOGO
XX receptor amberzyme substrate sequence.
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XX SQ Sequence 17 BP; 0 A; 6 C; 8 G; 0 T; 3 U; 0 Other;

Query Match 2.8%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 75.0%; Pred. No. 4e+02;  
Matches 12; Conservative 2; Mismatches 2; Indels 0; Gaps 0;

QY 263 GGCCCGGGCTTCTCC 278  
|||||||: :||  
Db 2 GGCCCGGGCUGUCC 17

## RESULT 468

ADL47866

ID ADL47866 standard; RNA; 17 BP.

XX AC ADL47866;

XX DT 20-MAY-2004 (first entry)

XX DE Human IKK-gamma substrate sequence #376.

XX KW antisense oligonucleotide; neurite growth inhibitor; NOGO;  
KW prostaglandin D2 receptor; PTGDR; IkappaB kinase; IKK;  
KW protein kinase PKR; cerebrovascular accident;  
KW central nervous system injury; CNS injury; spinal cord injury; cancer;  
KW melanoma; lymphoma; glioma; inflammatory disease; rheumatoid arthritis;  
KW restenosis; asthma; Crohn's disease; diabetes; obesity;  
KW autoimmune disease; lupus; multiple sclerosis; transplant rejection;  
KW graft rejection; ischaemia; reperfusion; glomerulonephritis; sepsis;  
KW allergy; asthma; allergic rhinitis; atopic dermatitis; Human IKK-gamma;  
KW substrate; ds.

XX OS Unidentified.

XX PN WO200281628-A2.

XX PD 17-OCT-2002.

XX PF 03-APR-2002; 2002WO-US010512.

XX PR 05-APR-2001; 2001US-00827395.

XX PR 29-MAY-2001; 2001US-0294412P.

XX PR 28-AUG-2001; 2001US-0315315P.

XX PA (RIBO-) RIBOZYME PHARM INC.

XX PI Blatt L, Chowrira B, Haerberli P, Mcswiggen J, Fosnaugh K;

XX DR WPI; 2003-058513/05.

XX PT Novel enzymatic nucleic acid that down-regulates expression of neurite  
PT growth inhibitor receptor, prostaglandin D2 receptor, ikappaB kinase or  
PT protein kinase PKR genes, for treating cancer and inflammatory disease.

XX PS Claim 59; SEQ ID NO 1399; 317pp; English.

XX CC The invention comprises nucleic acids (e.g. antisense oligonucleotides)  
CC that down regulate the expression or inhibit the function of a receptor  
CC for a neurite growth inhibitor, NOGO, prostaglandin D2 receptor (PTGDR),  
CC IkappaB kinase (IKK), or protein kinase PKR. The nucleic acids of the  
CC invention are useful for treating: cerebrovascular accident, central  
CC nervous system (CNS) injury, spinal cord injury, cancer (e.g. melanoma,  
CC lymphoma or glioma), inflammatory disease (e.g. rheumatoid arthritis,  
CC restenosis or asthma), Crohn's disease, diabetes, obesity, autoimmune  
CC disease, lupus, multiple sclerosis, transplant/graft rejection, a  
CC ischaemia/reperfusion injury, glomerulonephritis, sepsis, and allergic  
CC conditions (e.g. asthma, allergic rhinitis or atopic dermatitis). The  
CC nucleic acids of the invention are also useful for down-regulating the  
CC expression of a target gene and as a diagnostic tool to examine genetic  
CC drifts and mutations within diseased cells or to detect the presence of a  
CC target RNA in a cell. The present RNA sequence represents a human IKK-  
CC gamma substrate sequence.

XX SQ Sequence 17 BP; 1 A; 6 C; 8 G; 0 T; 2 U; 0 Other;

Query Match 2.8%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 75.0%; Pred. No. 4e+02;  
Matches 12; Conservative 2; Mismatches 2; Indels 0; Gaps 0;

QY 249 TGGAGGCGCGGTCGG 264  
:|||||||: :||  
Db 2 UGGAGGCGCGGCCCG 17

## RESULT 469

ADM54056/C

ID ADM54056 standard; mRNA; 17 BP.

XX AC ADM54056;

XX DT 03-JUN-2004 (first entry)

XX DE Human GRID mRNA substrate sequence #331.

XX KW Human; ss; GRID; Grb2-related with insert domain; hammerhead ribozyme;  
KW NCH ribozyme; G-cleaver ribozyme; Zinzyme; DNazyme; Inozyme;  
KW hairpin ribozyme; tissue rejection; graft rejection; leukaemia.  
XX OS Homo sapiens.

XX PN US2003134806-A1.

XX PD 17-JUL-2003.

XX PF 23-FEB-2001; 2001US-00792818.

XX PR 10-FEB-2000; 2000US-0181594P.

XX PA (JARV/) JARVIS T.

XX PA (CARL/) CARLOWITZ I V.

XX PA (MCSW/) MCSWIGGEN J.

XX PA (HAMB/) HAMBELIN P A.

XX PA (ELLI/) ELLIS J H.

XX PI Jarvis T, Carlowitz IV, Mcswiggen J, Hamblin PA, Ellis JH;

XX DR WPI; 2003-829646/77.

XX PT New nucleic acid molecule that down-regulates expression of Grb2-related  
PT with insert domain (GRID) gene, useful for treating a condition  
PT associated with the level of GRID, e.g. tissue/graft rejection and  
PT leukemia.

XX PS Claim 4; SEQ ID NO 331; 74pp; English.

XX CC The invention relates to a nucleic acid molecule that down-regulates  
CC expression of Grb2-related with insert domain (GRID) gene, e.g. a  
CC hammerhead ribozyme, NCH ribozyme, G-cleaver ribozyme, Zinzyme, DNazyme,  
CC amberzyme, Inozyme or hairpin ribozyme. Also include are a mammalian cell  
CC including the novel nucleic acid molecule, reducing GRID activity in a  
CC cell by contacting the cell with the novel nucleic acid molecule, a  
CC treating a patient having a condition associated with the level of GRID  
CC (e.g. tissue/graft rejection or leukaemia) by contacting the cell with  
CC the novel nucleic acid molecule, cleaving RNA of a GRID gene by  
CC contacting the cell with the novel nucleic acid molecule, an expression  
CC vector comprising a nucleic acid sequences (encoding at least the novel  
CC nucleic acid molecule in a manner that allows its expression), a  
CC mammalian cell including the expression vector and an enzymatic nucleic  
CC acid molecule that cleaves RNA derived from a GRID gene. The nucleic acid  
CC molecule is useful for treating a condition associated with the level of  
CC GRID, e.g. tissue/graft rejection and leukaemia. The present sequence is  
CC a target region for the enzymatic nucleic acids of the invention.

XX SQ Sequence 17 BP; 3 A; 4 C; 9 G; 0 T; 1 U; 0 Other;

Query Match 2.8%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 87.5%; Pred. No. 4e+02;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 200 CCTCCCGGGACCTGC 215  
DB 16 CCTCCCTGGGACCTCC 1  
||||| |||||

RESULT 470  
ABD20299/c  
ID ABD20299 standard; DNA; 17 BP.  
XX AC ABD20299;  
XX DT 29-JUL-2004 (first entry)  
XX DE Human C/EBP DNA fragment 2250.  
XX KW Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;  
KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;  
KW surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;  
KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;  
KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;  
KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;  
KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;  
KW pulmonary transplantation rejection; ds.  
XX KW  
XX OS Homo sapiens.  
XX PN WO200285309-A2.  
XX PD 31-OCT-2002.  
XX PF 23-APR-2002; 2002WO-US013143.  
XX PR 24-APR-2001; 2001US-0286036P.  
XX PA (EPIG-) EPIGENESIS PHARM INC.  
XX PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
XX PI Miller S, Tang L, Shahabuddin S;  
XX DR WPI; 2003-093058/08.  
XX KW  
XX PT Pharmaceutical composition for treating asthma, has antisense  
PT oligonucleotide containing less percentage of adenosine, targeted to  
PT nucleic acids associated with lung airway or lung dysfunction, and  
PT bronchodilating agent.  
XX PS  
XX PS Claim 15; SEQ ID NO 11632; 763pp; English.  
XX CC This invention describes a novel composition (a) a first active agent,  
CC comprising oligonucleotides, effective for alleviating  
CC bronchoconstriction, respiratory tract inflammation, allergies and  
CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,  
CC surfactant depletion or hyposecretion, when administered to a mammal. The  
CC oligonucleotides are derived from a gene encoding or regulating  
CC expression of a target polypeptide associated with lung airway or lung  
CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.  
CC The invention also describes a kit, that comprises: (a) a delivery  
CC device, in separate containers, (b) the oligonucleotides, (c)  
CC instructions for adding a carrier and for use of the kit. The composition  
CC of the invention has antiallergic, antiinflammatory, antiasthmatic,  
CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a  
CC beta-adrenergic agonist. The composition is useful for preventing or  
CC treating a respiratory, lung or malignant disease. The administered  
CC composition comprises oligo and is administered to reduce the production  
CC or availability, or to increase the degradation of the target mRNA or to  
CC reduce the amount of target polypeptide present in the lungs. The  
CC pulmonary obstruction, and/or bronchoconstriction and/or lung  
CC inflammation, allergies and/or surfactant hypoproduction are associated  
CC with a disease or condition such as pulmonary vasoconstriction.

CC inflammation, allergies, asthma, impeded respiration, respiratory  
CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary  
CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary  
CC transplantation rejection, pulmonary infections, bronchitis or cancer.  
CC The reduced adenosine content of the anti-sense oligos corresponding to  
CC thymidines present in the target RNA serves to prevent the breakdown of  
CC the oligonucleotides into products that free adenosine into the system  
CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to  
CC prevent any unwanted effects due to it  
XX  
SQ Sequence 17 BP; 0 A; 12 C; 5 G; 0 T; 0 U; 0 Other;

Query Match 2.8%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 87.5%; Pred. No. 4e+02;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 257 GCGGTGCGCGCGGGC 272  
DB 16 GCGGGCGCGCGGGC 1  
||||| ||||| |||||

RESULT 471  
ADK13270  
ID ADK13270 standard; DNA; 17 BP.  
XX AC ADK13270;  
XX DT 20-MAY-2004 (first entry)  
XX DE Human glioma endothelial marker (GEM) long tag SEQ ID NO:448.  
XX KW glioma; brain tissue; neoplastic; glioma endothelial marker; GEM;  
KW anticancer; antiglioma; immune response; cytostatic;  
KW multi-drug sensitive glioma; human; long tag; ss.  
XX KW  
XX OS Homo sapiens.  
XX OS Synthetic.  
XX PN WO2004016758-A2.  
XX PD 26-FEB-2004.  
XX PF 15-AUG-2003; 2003WO-US025614.  
XX PR 15-APR-2002; 2002US-0403390P.  
XX PR 01-APR-2003; 2003US-0458978P.  
XX PA (GENZ ) GENZYME CORP.  
XX PA (UYJO ) UNIV JOHNS HOPKINS.  
XX PI Madden SI, Wang CJ, Cook BP, Lattera J, Walter K;  
XX PI WPI; 2004-247973/23.  
XX PT Diagnosing glioma by detecting expression product of any one of 255  
PT genes, glioma endothelial markers, in brain tissue sample suspected of  
PT being neoplastic, and comparing the expression with expression in normal  
PT brain tissue sample.  
XX PS  
XX PS Example 2; SEQ ID NO 448; 114pp; English.  
XX CC The present invention describes a method (M1) for aiding in the diagnosis  
CC of glioma. (M1) involves detecting an expression product of at least one  
CC gene (I) in a first brain tissue sample (T) suspected of being  
CC neoplastic, where (I) is chosen from any one of 255 genes (glioma  
CC endothelial markers (GEMs)) as given in specification, and comparing the  
CC expression of (I) in (T) with expression of (I) in a second normal brain  
CC tissue sample (R), where increased expression of (I) in (T) relative to  
CC (R), identifies (T) as likely to be neoplastic. Also described: (1)  
CC treating (M2) glioma involves contacting cells of the glioma with an  
CC antibody that specifically binds to a extracellular epitope; (2)  
CC identifying (M3) a test compound as potential anticancer or antiglioma  
CC drug involves contacting a test compound with the cell which expresses

CC (1), monitoring an expression product of the at least one gene and  
CC identifying test compound as a potential anticancer drug if it decreases  
CC the expression of at least one gene; (3) identifying (M4) a test compound  
CC as potential anticancer or anti-glioma drug involves contacting a test  
CC compound with the cell which expresses mRNA of at least one gene  
CC identified by a tag as described above, monitoring mRNA of the gene, and  
CC identifying the test compound as a potential anticancer drug if it  
CC decreases the expression of at least one gene; and (4) inducing (M5) an  
CC immune response to glioma involves administering to a mammal, a protein  
CC or (I). (I) have cytostatic activities, and can be used to trigger immune  
CC destruction of glioma cells, and as immune response inducers. (M1) is  
CC useful for aiding in diagnosing glioma. (M2) is useful for treating multi  
CC -drug sensitive glioma in a human. (M5) is useful for inducing an immune  
CC response to a glioma in a mammal having glioma or in a mammal who has had  
CC a glioma surgically removed. The present sequence represents a human GEM  
CC long tag oligonucleotide, which is used in the exemplification of the  
CC present invention.

SQ Sequence 17 BP; 1 A; 8 C; 5 G; 3 T; 0 U; 0 Other;  
Query Match 2.8%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 87.5%; Pred. No. 4e+02;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 177 TGTGAGCTGCTGGCCCC 192  
||||| ||||| |||||  
Db 2 TGTGAGCGCTGCCCC 17

RESULT 472  
ADM58919/c  
ID ADM58919 standard; RNA; 17 BP.  
XX  
AC ADM58919;  
XX  
DT 03-JUN-2004 (first entry)  
XX  
DE Hepatitis B virus (HBV) RNA target sequence #1053.  
XX  
KW Hepatitis B virus; HBV; ss; enzymatic nucleic acid; RNA cleavage;  
KW Hepatitis B virus infection; hepatitis; hepatocellular carcinoma;  
KW cirrhosis; liver failure; lamivudine; interferon; genetic drift;  
KW virucide; hepatotropic; antiinflammatory; cytostatic.  
XX  
OS Hepatitis B virus.  
XX  
FN US2004054156-A1.  
XX  
PD 18-MAR-2004.

XX 15-JAN-2003; 2003US-00342902.  
XX  
PF 14-MAY-1992; 92US-00882712.  
PR 07-FEB-1994; 94US-00193627.  
PR 08-NOV-1999; 99US-00436430.  
PR 20-MAR-2000; 2000US-00531025.  
PR 09-AUG-2000; 2000US-00636385.  
PR 24-OCT-2000; 2000US-00696347.  
PR 08-JUN-2001; 2001US-00877478.  
XX  
PA (DRAP/) DRAPER K.  
PA (BLAT/) BLATT L.  
PA (MCSW/) MCSWIGGEN J A.  
PA (MORR/) MORRISSEY D.  
XX

PI Draper K, Blatt L, Mcswiggen JA, Morrissey D;  
XX WPI; 2004-247781/23.  
DR  
XX Novel enzymatic nucleic acid molecule such as DNazymes and inozymes  
PT specifically cleaving RNA derived from hepatitis B virus and comprising  
PT one or more binding arms, useful for treating hepatitis and cirrhosis.  
XX

PS Disclosure; SEQ ID NO 1053; 122pp; English.

XX The invention relates to an enzymatic nucleic acid molecule that  
CC specifically cleaves RNA derived from hepatitis B virus (HBV) and  
CC comprising one or more binding arms, without requiring the presence of a  
CC 2'-OH group within the molecule for activity. The nucleic acids are  
CC useful for treating hepatitis B virus infection, hepatitis,  
CC hepatocellular carcinoma, cirrhosis and liver failure, either alone or in  
CC combination with other therapies such as lamivudine and interferons. The  
CC nucleic acids are useful as diagnostic tools to examine genetic drift and  
CC mutations within diseased cells, for detecting the presence of HBV RNA in  
CC a cell, for the study of RNA and for down-regulating gene expression of  
CC target genes in bacterial, fungal, viral, plant or mammalian cells. This  
CC sequence represents an HBV RNA target sequence, used in the scope of the  
CC invention. Note: The sequence data for this patent is also available in  
CC electronic format from USPTO at seqdata.uspto.gov/sequence.html.

SQ Sequence 17 BP; 1 A; 8 C; 4 G; 0 T; 4 U; 0 Other;

Query Match 2.8%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 87.5%; Pred. No. 4e+02;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 117 AGCGGGCGGAAAAGCC 132  
||||| ||||| |||||  
Db 16 AGCGGGCGGTAGAGCC 1

RESULT 473  
AD183671  
ID AD183671 standard; RNA; 17 BP.  
XX  
AC AD183671;  
XX  
DT 03-JUN-2004 (first entry)  
XX  
DE HCV DNazyme substrate sequence #917.  
XX  
KW ss; enzymatic nucleic acid; RNA cleavage; hepatitis C virus; HCV;  
KW HCV infection; type I interferon; DNazyme.  
XX  
OS Hepatitis C virus.  
XX  
PN US2003125270-A1.  
XX  
PD 03-JUL-2003.  
XX  
PF 18-DEC-2000; 2000US-00740332.  
XX  
PR 18-DEC-2000; 2000US-00740332.

XX (BLAT/) BLATT L.  
PA (MCSW/) MCSWIGGEN J.  
PA (ROBE/) ROBERTS E.  
PA (PAVC/) PAVCO P A.  
PA (MACE/) MACEJACK D.  
XX  
PI Blatt L, Mcswiggen J, Roberts E, Pavco PA, Macejack D;  
XX WPI; 2004-031273/03.  
DR  
XX Enzymatic nucleic acid molecules which specifically cleave RNA derived  
PT from hepatitis C virus (HCV), useful for the treatment of HCV infections,  
PT especially in combination with type I interferon therapy.  
XX  
PS Claim 1; SEQ ID NO 917; 198pp; English.

XX The invention relates to an enzymatic nucleic acid molecule which  
CC specifically cleaves RNA derived from hepatitis C virus (HCV), in which  
CC the binding arms of the enzymatic nucleic acid molecule comprises  
CC sequences complementary to any of the defined substrate sequences given  
CC in the specification. The nucleic acid molecule may be administered for  
CC the treatment of HCV infections, especially in combination with type I

CC interferons. The present sequence represents a HCV DNase substrate  
 CC sequence.  
 XX Sequence 17 BP; 1 A; 9 C; 5 G; 0 T; 2 U; 0 Other;  
 SQ Query Match 2.8%; Score 12.8; DB 1; Length 17;  
 Best Local Similarity 75.0%; Pred. No. 4e+02; Indels 0; Gaps 0;  
 Matches 12; Conservative 2; Mismatches 2; Indels 0; Gaps 0;  
 Qy 210 ACCTGCGCGGGTGC 225  
 |||:|||||:|  
 Db 2 ACCUGCGCGCGCTC 17

RESULT 474  
 ADI86393/C  
 ID ADI86393 standard; RNA; 17 BP.  
 XX AC ADI86393;  
 XX 03-JUN-2004 (first entry)  
 XX HCV DNase substrate sequence #3639.  
 XX ss: enzymatic cleavage; RNA cleavage; hepatitis C virus; HCV;  
 KW HCV infection; type I interferon; DNase.  
 XX Hepatitis C virus.  
 XX US2003125270-A1.  
 XX 03-JUL-2003.  
 XX 18-DEC-2000; 2000US-00740332.  
 XX 18-DEC-2000; 2000US-00740332.  
 XX (BLAT/) BLATT L.  
 PA (MCSW/) MCSWIGGEN J.  
 PA (ROBE/) ROBERTS E.  
 PA (PAVC/) PAVCO P A.  
 PA (MACE/) MACEJACK D.  
 XX Blatt L, Mcswiggen J, Roberts E, Pavco PA, Macejack D;  
 PI WPI; 2004-031273/03.  
 XX Enzymatic cleavage; RNA cleavage; hepatitis C virus; HCV;  
 PT from hepatitis C virus (HCV), useful for the treatment of HCV infections,  
 PT especially in combination with type I interferon therapy.  
 XX Claim 1; SEQ ID NO 3639; 198pp; English.

The invention relates to an enzymatic cleavage RNA derived from hepatitis C virus (HCV), in which the binding arms of the enzymatic cleavage RNA molecule comprises sequences complementary to any of the defined substrate sequences given in the specification. The nucleic acid molecule may be administered for the treatment of HCV infections, especially in combination with type I interferons. The present sequence represents a HCV DNase substrate sequence.

Query Match 2.8%; Score 12.8; DB 1; Length 17;  
 Best Local Similarity 87.5%; Pred. No. 4e+02; Indels 0; Gaps 0;  
 Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 Qy 208 GGACCTGCGCGGCTC 223  
 |||:|||||:|  
 Db 16 GCACCTGCGCGGCTC 1

RESULT 475  
 ADI84179  
 ID ADI84179 standard; RNA; 17 BP.  
 XX AC ADI84179;  
 XX 03-JUN-2004 (first entry)  
 XX HCV DNase substrate sequence #1425.  
 XX ss: enzymatic cleavage; RNA cleavage; hepatitis C virus; HCV;  
 KW HCV infection; type I interferon; DNase.  
 XX Hepatitis C virus.  
 XX US2003125270-A1.  
 XX 03-JUL-2003.  
 XX 18-DEC-2000; 2000US-00740332.  
 XX 18-DEC-2000; 2000US-00740332.  
 XX (BLAT/) BLATT L.  
 PA (MCSW/) MCSWIGGEN J.  
 PA (ROBE/) ROBERTS E.  
 PA (PAVC/) PAVCO P A.  
 PA (MACE/) MACEJACK D.  
 XX Blatt L, Mcswiggen J, Roberts E, Pavco PA, Macejack D;  
 PI WPI; 2004-031273/03.  
 XX Enzymatic cleavage; RNA cleavage; hepatitis C virus; HCV;  
 PT from hepatitis C virus (HCV), useful for the treatment of HCV infections,  
 PT especially in combination with type I interferon therapy.  
 XX Claim 1; SEQ ID NO 1425; 198pp; English.

The invention relates to an enzymatic cleavage RNA derived from hepatitis C virus (HCV), in which the binding arms of the enzymatic cleavage RNA molecule comprises sequences complementary to any of the defined substrate sequences given in the specification. The nucleic acid molecule may be administered for the treatment of HCV infections, especially in combination with type I interferons. The present sequence represents a HCV DNase substrate sequence.

Query Match 2.8%; Score 12.8; DB 1; Length 17;  
 Best Local Similarity 75.0%; Pred. No. 4e+02; Indels 0; Gaps 0;  
 Matches 12; Conservative 2; Mismatches 2; Indels 0; Gaps 0;  
 Qy 20 TGGGAGGGGTGGTGC 35  
 :|||||:|  
 Db 2 UGGGAGGGGTGGTGC 17

RESULT 476  
 ADI86509/C  
 ID ADI86509 standard; RNA; 17 BP.  
 XX AC ADI86509;  
 XX 03-JUN-2004 (first entry)  
 XX HCV DNase substrate sequence #3755.  
 XX ss: enzymatic cleavage; RNA cleavage; hepatitis C virus; HCV;  
 KW HCV infection; type I interferon; DNase.  
 XX Hepatitis C virus.

XX PN US2003125270-A1.  
 XX PD 03-JUL-2003.  
 XX PF 18-DEC-2000; 2000US-00740332.  
 XX PR 18-DEC-2000; 2000US-00740332.  
 XX PA (BLATT/) BLATT L.  
 XX PA (MCSW/) MCSWIGGEN J.  
 XX PA (ROBE/) ROBERTS E.  
 XX PA (PAVC/) PAVCO P A.  
 XX PA (MACE/) MACEJACK D.  
 XX PI Blatt L, Mcswiggen J, Roberts E, Pavco PA, Macejack D;  
 XX DR WPI; 2004-031273/03.  
 XX PT Enzymatic nucleic acid molecules which specifically cleave RNA derived  
 XX PT from hepatitis C virus (HCV), useful for the treatment of HCV infections,  
 XX PT especially in combination with type I interferon therapy.  
 XX PS Claim 1; SEQ ID NO 3755; 198pp; English.  
 XX CC The invention relates to an enzymatic nucleic acid molecule which  
 XX CC specifically cleaves RNA derived from hepatitis C virus (HCV), in which  
 XX CC the binding arms of the enzymatic nucleic acid molecule comprises  
 XX CC sequences complementary to any of the defined substrate sequences given  
 XX CC in the specification. The nucleic acid molecule may be administered for  
 XX CC the treatment of HCV infections, especially in combination with type I  
 XX CC interferons. The present sequence represents a HCV DNase substrate  
 XX CC sequence.  
 XX SQ Sequence 17 BP; 1 A; 6 C; 6 G; 0 T; 4 U; 0 Other;  
 Query Match 2.8%; Score 12.8; DB 1; Length 17;  
 Best Local Similarity 87.5%; Pred. No. 4e+02;  
 Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 433 GGACTCGGCTCACACA 448  
 Db 17 GGACTGGGCCACACA 2  
 RESULT 477  
 ADN44083/C  
 ID ADN44083 standard; DNA; 17 BP.  
 AC ADN44083;  
 XX 15-JUL-2004 (first entry)  
 DT Mutant cell identification-related mutagenic oligonucleotide SeqID752.  
 DE cell identification; oligonucleotide-directed sequence alteration;  
 XX selectable phenotype; transgenic plant; herbicide resistance;  
 KW sterile plant; abiotic stress tolerance; albino plant;  
 KW amino acid production; ss.  
 XX Zea mays.  
 OS Synthetic.  
 XX WO2004033708-A2.  
 PN 22-APR-2004.  
 XX 07-OCT-2003; 2003WO-US031862.  
 XX 07-OCT-2002; 2002US-0416983P.  
 XX 07-MAR-2003; 2003US-0453360P.  
 XX (UYDE ) UNIV DELAWARE.  
 PA (NAPR-) UNIV DELAWARE.  
 PI Kmiec EB, Van Brabant A;  
 XX WPI; 2004-340941/31.

PA (NAPR-) NAPRO BIO THERAPEUTICS INC.  
 XX Kmiec EB, Van Brabant A;  
 XX WPI; 2004-340941/31.  
 XX Identifying a cell with a desired oligonucleotide-directed sequence  
 XX alteration at a nucleic acid target site within the cell by identifying  
 XX the desired sequence alteration in cells selected for the presence of a  
 XX selectable phenotype.  
 XX Example 24; SEQ ID NO 752; 303pp; English.  
 XX This invention relates to a novel method of identifying a cell having a  
 XX desired oligonucleotide-directed sequence alteration at a first nucleic  
 XX acid target site within the cell. The method comprises identifying the  
 XX desired sequence alteration in cells that have been selected for the  
 XX presence of a selectable phenotype conferred by a concurrent  
 XX oligonucleotide-directed sequence alteration at a second nucleic acid  
 XX target site within the cells. The method is useful in identifying a cell  
 XX having a desired oligonucleotide-directed sequence alteration at a first  
 XX nucleic acid target site within the cell. The method may be useful for  
 XX the production of plants with herbicide resistance, male or female  
 XX sterile plants, abiotic stress tolerance, albino plants or plants with  
 XX altered amino acid production as well as for use in mammalian cell lines.  
 XX The present sequence is that of a mutagenic oligonucleotide which was  
 XX used in the exemplification of the invention.  
 XX SQ Sequence 17 BP; 3 A; 7 C; 5 G; 2 T; 0 U; 0 Other;  
 Query Match 2.8%; Score 12.8; DB 1; Length 17;  
 Best Local Similarity 87.5%; Pred. No. 4e+02;  
 Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 410 CTGAGCTGTGGACGT 425  
 Db 17 CTGAGCTGAGGCCGT 2  
 RESULT 478  
 ADN44082  
 ID ADN44082 standard; DNA; 17 BP.  
 AC ADN44082;  
 XX 15-JUL-2004 (first entry)  
 DT Mutant cell identification-related mutagenic oligonucleotide SeqID751.  
 DE cell identification; oligonucleotide-directed sequence alteration;  
 KW selectable phenotype; transgenic plant; herbicide resistance;  
 KW sterile plant; abiotic stress tolerance; albino plant;  
 KW amino acid production; ss.  
 XX Zea mays.  
 OS Synthetic.  
 XX WO2004033708-A2.  
 PN 22-APR-2004.  
 XX 07-OCT-2003; 2003WO-US031862.  
 XX 07-OCT-2002; 2002US-0416983P.  
 XX 07-MAR-2003; 2003US-0453360P.  
 XX (UYDE ) UNIV DELAWARE.  
 PA (NAPR-) NAPRO BIO THERAPEUTICS INC.  
 PI Kmiec EB, Van Brabant A;  
 XX WPI; 2004-340941/31.



PT Identifying a cell with a desired oligonucleotide-directed sequence  
PT alteration at a nucleic acid target site within the cell by identifying  
PT the desired sequence alteration in cells selected for the presence of a  
PT selectable phenotype.

XX Example 24; SEQ ID NO 751; 303pp; English.

XX This invention relates to a novel method of identifying a cell having a  
CC desired oligonucleotide-directed sequence alteration at a first nucleic  
CC acid target site within the cell. The method comprises identifying the  
CC desired sequence alteration in cells that have been selected for the  
CC presence of a selectable phenotype conferred by a concurrent  
CC oligonucleotide-directed sequence alteration at a second nucleic acid  
CC target site within the cells. The method is useful in identifying a cell  
CC having a desired oligonucleotide-directed sequence alteration at a first  
CC nucleic acid target site within the cell. The method may be useful for  
CC the production of plants with herbicide resistance, male or female  
CC sterile plants, abiotic stress tolerance, albino plants or plants with  
CC altered amino acid production as well as for use in mammalian cell lines.  
CC The present sequence is that of a mutagenic oligonucleotide which was  
CC used in the exemplification of the invention.

XX Sequence 17 BP; 2 A; 5 C; 7 G; 3 T; 0 U; 0 Other;

Query Match 2.8%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 87.5%; Pred. No. 4e+02;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 410 CTGAGCTGTGGAGCT 425  
Db 1 CTGAGCTGTGGAGCT 16

RESULT 479  
ADQ80740/c  
ID ADQ80740 standard; DNA; 17 BP.

XX ADQ80740;

XX 23-SEP-2004 (first entry)

XX Porcine TSSC5 intron 1 DNA sequence polymorphism oligonucleotide.

XX Anorectic; Antidiabetic; Muscular; Gene Therapy; CpG island;  
KW IGF2 gene intron 3; muscle mass; fat deposition; test number; obesity;  
KW muscle deficiency; diabetes; SNP; single nucleotide polymorphism; ss.

XX Sus scrofa.

XX Key Location/Qualifiers  
FH variation replace(10,T)  
FT /\*tag= a  
FT /standard\_name= "Single\_nucleotide\_polymorphism"

XX EPI437418-A1.

XX 14-JUL-2004.

XX 10-JAN-2003; 2003EP-00075091.

XX 10-JAN-2003; 2003EP-00075091.

XX (UYLI-) UNIV LIEGE.  
PA (MELI-) MELICA HB.  
PA (GENT-) GENTEC BV.

XX Andersson L, Andersson G, Georges M, Buys N;  
XX WPI; 2004-501307/48.

XX Selecting an animal for desired genotypic or potential phenotypic  
PT properties such as muscle mass and/or fat deposition, comprises testing  
PT for a single nucleotide polymorphism in intron 3 of the IGF2 gene.

XX Example 1; Page 20; 38pp; English.

XX The present invention relates to a method (M1) for selecting an animal  
CC for having desired genotypic or potential phenotypic properties. (M1)  
CC comprises testing the animal for the presence of a nucleic acid  
CC modification affecting the activity of an evolutionary conserved CpG  
CC island located in intron 3 of an IGF2 gene; and/or binding of a nuclear  
CC factor to an IGF2 gene. The nuclear factor is capable of binding to a  
CC stretch of nucleotides which in the wild type pig, mouse or human IGF2  
CC gene is part of an evolutionary conserved CpG island, located in intron 3  
CC of the IGF2 gene. The stretch is functionally equivalent to (ADQ80709).  
CC The nucleic acid modification in ADQ80709 comprises a G to A transition  
CC at IGF2-intron3-nt3072. (M1) is useful for selecting an animal with  
CC properties related to muscle mass, fat deposition, and/or test number.  
CC Also claimed is a method (M2) for modulating mRNA transcription of an  
CC IGF2 gene by modulating the activity of an evolutionarily conserved CpG  
CC island located in intron 3 of an IGF2 gene and/or modulating binding of a  
CC nuclear factor to an IGF2 gene. Also claimed is a method (M3) for  
CC identifying a compound capable of modulating mRNA transcription of an  
CC IGF2 gene and a method (M4) for identifying a compound capable of  
CC modulating binding of a nuclear factor to an IGF2 gene. (M2) is useful  
CC for modulating mRNA transcription of an IGF2 gene in a cell or organism.  
CC (M3) and (M4) are useful for identifying compounds capable of modulating  
CC mRNA transcription of an IGF2 gene and/or modulating binding of a nuclear  
CC factor to an IGF2 gene. Compounds identified are potentially useful for  
CC treating obesity, muscle deficiencies and diabetes. The present sequence  
CC is a porcine sequence tagged sites (STS) comprising a DNA sequence  
CC polymorphism, which was isolated in an example from the invention.

XX Sequence 17 BP; 0 A; 14 C; 2 G; 1 T; 0 U; 0 Other;

Query Match 2.8%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 87.5%; Pred. No. 4e+02;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 13 GTGGGCTGGGAGGG 28  
Db 17 GGGGGCGGGGAGGG 2

RESULT 480  
ADQ92762/c  
ID ADQ92762 standard; RNA; 17 BP.

XX ADQ92762;

XX 21-OCT-2004 (first entry)

XX Androgen receptor siRNA sense strand, SEQ ID 338.

XX Endocrine; Antiseborrheic; Dermatological; Depilatory; RNA interference;  
KW small interfering RNA; siRNA;  
KW androgen signal transduction pathway protein;  
KW androgen signal transduction; androgen receptor; hair loss;  
KW hyperandrogenic condition; androgenic alopecia; male pattern alopecia;  
KW acne vulgaris; seborrhea; female hirsutism; prostatic hypertrophy; ds.  
XX Synthetic.

XX Key Location/Qualifiers  
FH misc\_feature 16..17  
FT /\*tag= a  
FT /note= "2 deoxynucleotide overhang"

XX WO2004063331-A2.

XX 29-JUL-2004.

XX 05-JAN-2004; 2004WO-US000128.

XX 03-JAN-2003; 2003US-0437842P.

XX

[illegible]

XX New polynucleotide(s) anti-sense to human telomerase - used for detecting  
PT or inhibiting human telomerase, e.g. for treating cancers, contraception,  
PT immuno-suppression or treating infection.  
XX  
XX Claim 11; Page 65; 80pp; English.  
XX  
XX Sequences shown in AAV41169 to AAV41181 represent antisense  
CC oligonucleotides to the RNA component of human telomerase (hTR). These  
CC antisense oligonucleotides specifically hybridise to a nucleotide  
CC sequence within an accessible region of the hTR, but that does not  
CC hybridise to a sequence within the template region of hTR. These  
CC oligonucleotides may specifically be used for detection of an RNA  
CC component of human telomerase in a sample. This is useful for diagnosing  
CC cancer (especially neuroblastoma, bladder, colon and prostate cancer),  
CC and providing prognosis for a cancer patient. The inhibitory  
CC oligonucleotides can inhibit the telomerase activity level in a cell by  
CC interfering with transcription of the RNA component, decreasing the half-  
CC life of the telomerase RNA component transcript, inhibiting assembly of  
CC the RNA component into the telomerase holoenzyme, or inhibiting the  
CC polymerase activity of telomerase. These antisense oligonucleotides can  
CC be used for inhibiting telomerase activity in both cultured cells and in  
CC cells in vivo. They can be used in therapeutics for treating or  
CC preventing cancer, for contraception or sterilisation, for  
CC immunosuppression, and for selectively down-regulating specific branches  
CC of the immune system, e.g. a specific subset of T-cells, in anti-  
CC inflammatory therapies or for treating infections by, e.g. yeast,  
CC parasites or fungi  
XX  
XX Sequence 30 BP; 4 A; 10 C; 8 G; 8 T; 0 U; 0 Other;  
SQ  
Query Match 2.8%; Score 12.8; DB 1; Length 30;  
Best Local Similarity 70.8%; Pred. No. 5.4e+02;  
Matches 17; Conservative 0; Mismatches 7; Indels 0; Gaps 0;  
Qy 131 CCTCGGCTGCGGCTTCCACCGT 154  
Db ||||| ||||| ||||| |||||  
5 CCTCTCTCGGCGCTGAACCGT 28  
RESULT 483  
AAZ07298/C  
ID AAZ07298 standard; DNA; 38 BP.  
XX  
XX AAZ07298;  
XX  
XX 22-OCT-1999 (first entry)  
XX  
XX Human telomerase RNA gene (hTR) promoter specific primer h112.  
XX  
XX Telomerase RNA; TR; promoter; cytotoxin; cancer; neoplasia; hTR;  
XX gene therapy; thymidine kinase gene; anticancer therapy; human;  
XX mutagenesis; PCR primer; ss.  
XX  
XX Synthetic.  
XX OS Homo sapiens.  
XX  
XX WO9938964-A2.  
XX  
XX 05-AUG-1999.  
XX  
XX 29-JAN-1999; 99WO-GB000308.  
XX  
XX 29-JAN-1998; 98GB-00001902.  
XX  
XX (CANC-) CANCER RES CAMPAIGN TECHNOLOGY.  
XX  
XX Keith WN;  
XX  
XX WPI; 1999-479183/40.  
XX  
XX Mouse and human telomerase RNA gene promoters, useful for tumor specific  
PT gene therapy.

XX Disclosure; Fig 12; 109pp; English.  
XX  
XX The invention relates to promoter regions from mouse and human telomerase  
CC RNA (TR) component genes. The TR gene promoter can be linked to a  
CC heterologous gene, especially a gene encoding a cytotoxin, for therapy of  
CC cancer, especially neoplasias. The telomerase is necessary for the  
CC unrestricted proliferative capacity of many human cancers. Mutation or  
CC dysregulation of the telomerase repression pathway may cause reactivation  
CC or upregulation of telomerase expression in cancer. Substances,  
CC identified in the methods, can be used to block transcription from the TR  
CC gene promoter through interaction of the 5' regulatory sequences. These  
CC substances, e.g. antisense oligonucleotides, transcription factors, are  
CC peptide nucleic acids and factors that disrupt signal transduction, are  
CC useful for cancer therapy. In particular, gene therapy vectors  
CC (especially pGT62-codrupp) comprising the promoter and a viral thymidine  
CC kinase gene can be used to convert a prodrug, e.g. gancyclovir, so that  
CC neoplasia can be controlled or treated. Direct down-regulation of  
CC telomerase RNA gene through manipulation of transcription factors may be  
CC effective anticancer therapy and the cloning of the hTR gene promoter  
CC allows the analysis of therapeutic molecules which modulate hTR promoter  
CC activity. Sequences AAZ07696-321 represent PCR primers used in cloning  
CC and mutagenesis of human TR gene (hTR) promoter region  
XX  
XX Sequence 38 BP; 3 A; 7 C; 21 G; 7 T; 0 U; 0 Other;  
SQ  
Query Match 2.8%; Score 12.8; DB 1; Length 38;  
Best Local Similarity 70.8%; Pred. No. 5e+02;  
Matches 17; Conservative 0; Mismatches 7; Indels 0; Gaps 0;  
Qy 223 CGCTGCCGAGCCCGCAACCCG 246  
Db ||||| ||||| ||||| |||||  
25 CCCAGGCCACCCCTCCGCAACCCG 2  
RESULT 484  
AAA08205  
ID AAA08205 standard; DNA; 62 BP.  
XX  
XX AAA08205;  
XX  
XX 28-JUN-2000 (first entry)  
XX  
XX Adenovirus nucleotide sequence SEQ ID NO:20.  
XX  
XX Human; telomerase; hTR; telomeric repeat amplification protocol; TRAP;  
XX identification; detection; quantification; cancer; metastasis; ss.  
XX  
XX Mastadenovirus.  
XX  
XX US6037126-A.  
XX  
XX 14-MAR-2000.  
XX  
XX 12-JUN-1997; 97US-00873709.  
XX  
XX 12-JUN-1997; 97US-00873709.  
XX  
XX (INVI-) INVITRO DIAGNOSTICS INC.  
XX  
XX Grossman A;  
XX  
XX WPI; 2000-282223/24.  
XX  
XX Pair of RNA molecules for detecting telomerase, useful for diagnosis of  
XX cancer or metastases, can be ligated when bound to telomerase subunit  
XX protein.  
XX  
XX Example 2; Col 23; 32pp; English.  
XX  
XX The present invention describes a pair of RNA molecules (R1, R2) for  
XX detecting a first subunit protein (I) of telomerase. R1 and R2 both bind  
XX to (I) and have formulae 5'-A-B-C-3' (R1) 5'-D-E-F-3' (R2) where: A and F

CC = RNA segment of 10 to 100000 nucleotides (nt) that together are replicated by RNA replicase; B and E = RNA segments of 10 to 250 nt from the Y region of human telomerase and bind specifically to (1); C and D = RNA segments of 1 to 10000 nt which can be ligated together. Ligation of C and D produces R3 of formula 5'-A-B-C-D-E-F-3' (R3) with E and B bound to (1). Replication of R3 by RNA replicase indicates presence of (1). Also described are: (1) method for detecting (1) using R1 and R2; (2) kit for this process containing R1, R2, ligase and an amplification system; and (3) method for making R1 and R2 by transcription from appropriate DNA. R1 and R2 are used to detect and quantify telomerase, particularly for diagnosis of cancer and for detection of metastases. R1 and R2 provide an assay that does not require expensive equipment or highly trained personnel, and is suitable for automation. The present sequence represents an oligonucleotide used in the exemplification of the present invention

XX Sequence 62 BP; 16 A; 27 C; 10 G; 9 T; 0 U; 0 Other;  
SQ  
Query Match 2.8%; Score 12.8; DB 1; Length 62;  
Best Local Similarity 70.8%; Pred. No. 3.2e+02;  
Matches 17; Conservative 0; Mismatches 7; Indels 0; Gaps 0;

OY 222 TCGCTGCCCGCCCGCAACCC 245  
||| ||||| ||||| |||||  
Db 38 TCCGAGGCCCGCCCTCCGCAACCC 61

RESULT 485  
AAH24816  
ID AAH24816 standard; RNA; 62 BP.  
AC AAH24816;  
XX  
DT 06-AUG-2001 (first entry)  
XX Human nucleic acid sequence derived from Y-1 domain of telomerase.  
DE  
DE RNA-binding protein; RBP; RNA replicase; RNA identification; telomerase;  
KW ss.  
KW  
OS Homo sapiens.  
XX  
XX US6238867-B1.  
XX  
XX 29-MAY-2001.  
XX  
XX 22-FEB-1999; 99US-00255464.  
XX  
XX 23-FEB-1998; 98US-0075495P.  
XX  
XX (INVI-) INVITRO DIAGNOSTICS INC.  
XX  
XX Roninson IB, Grossman A;  
XX  
XX WPI; 2001-366472/38.  
XX  
XX New ribonucleic acids useful for identifying naturally occurring RNA sequences having affinity for RNA-binding protein having protein and RNA components.

XX Example 2; Col 26; 36pp; English.  
XX  
XX The specification describes a first RNA (RNA1) and a second RNA (RNA2) for use in binding an RNA-binding protein (RBP) having protein and RNA components. RNA1 has the formula 5'-A-B-C-3', where A is section having 10-100,000 nucleotides and is can be received by an RNA replicase and with another DNA sequence, F, being replicated; B is section having 10-3,000 nucleotides which have affinity to one consensus sequence of the RBP and which can bind to the protein component; C is section having about 1-20 nucleotides and which can be ligated to D of the second RNA molecule. RNA2 has the formula 5'-B-E-F-3', where D is section having 1-20 nucleotides and which can be ligated to C; E is section 10-3,000 nucleotides which have affinity to second consensus sequence of the RBP

CC and which can bind to the protein component; F is section having 10-100,000 nucleotides which can be received by an RNA replicase and with A being replicated. RNA1 and RNA2 are capable of forming a third RNA (RNA3) of formula 5'-A-B-C-D-E-F-3'. The method is useful for the identification and characterization of RNA sequences having specific affinity to amino acid consensus sequences of RBPs, and to RNAs. AAH24815-16 were used to produce a double-stranded RNA1, comprising the Y-1 domain of human telomerase

XX Sequence 62 BP; 16 A; 27 C; 10 G; 9 T; 0 U; 0 Other;  
SQ  
Query Match 2.8%; Score 12.8; DB 1; Length 62;  
Best Local Similarity 70.8%; Pred. No. 3.2e+02;  
Matches 17; Conservative 0; Mismatches 7; Indels 0; Gaps 0;

OY 222 TCGCTGCCCGCCCGCAACCC 245  
||| ||||| ||||| |||||  
Db 38 TCCGAGGCCCGCCCTCCGCAACCC 61

RESULT 486  
AAH08204/C  
ID AAA08204 standard; DNA; 66 BP.  
XX  
XX AAA08204;  
XX  
XX 28-JUN-2000 (first entry)  
XX  
XX Adenovirus nucleotide sequence SEQ ID NO:19.  
DE  
DE Human; telomerase; hTR; telomeric repeat amplification protocol; TRAP;  
KW identification; detection; quantification; cancer; metastasis; ss.  
KW Mastadenovirus.  
XX  
XX US6037126-A.  
XX  
XX 14-MAR-2000.  
XX  
XX 12-JUN-1997; 97US-00873709.  
XX  
XX 12-JUN-1997; 97US-00873709.  
XX  
XX (INVI-) INVITRO DIAGNOSTICS INC.  
XX  
XX Grossman A;  
XX  
XX WPI; 2000-282223/24.  
XX  
XX Pair of RNA molecules for detecting telomerase, useful for diagnosis of cancer or metastases, can be ligated when bound to telomerase subunit protein.

XX Example 2; Col 23; 32pp; English.

XX The present invention describes a pair of RNA molecules (R1, R2) for detecting a first subunit protein (1) of telomerase. R1 and R2 both bind to (1) and have formulae 5'-A-B-C-3', (R1) 5'-D-E-F-3', (R2) where: A and F = RNA segment of 10 to 100000 nucleotides (nt) that together are replicated by RNA replicase; B and E = RNA segments of 10 to 250 nt from the Y region of human telomerase and bind specifically to (1); C and D = RNA segments of 1 to 10000 nt which can be ligated together. Ligation of C and D produces R3 of formula 5'-A-B-C-D-E-F-3' (R3) with E and B bound to (1). Replication of R3 by RNA replicase indicates presence of (1). Also described are: (1) method for detecting (1) using R1 and R2; (2) kit for this process containing R1, R2, ligase and an amplification system; and (3) method for making R1 and R2 by transcription from appropriate DNA. R1 and R2 are used to detect and quantify telomerase, particularly for diagnosis of cancer and for detection of metastases. R1 and R2 provide an assay that does not require expensive equipment or highly trained personnel, and is suitable for automation. The present sequence represents an oligonucleotide used in the exemplification of the present invention

```
XX SQ Sequence 66 BP; 10 A; 11 C; 28 G; 17 T; 0 U; 0 Other;
Query Match      2.8%; Score 12.8; DB 1; Length 66;
Best Local Similarity 70.8%; Pred. No. 3e+02;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 222 TCGCCTGCCAGCCCGAACC 245
Db 29 TCCAGGCCACCCCTCGCAACC 6

RESULT 487
AAH24815/C
ID AAH24815 standard; RNA; 66 BP.
XX AC AAH24815;
XX DT 06-AUG-2001 (first entry)
XX DE Human nucleic acid sequence derived from Y-1 domain of telomerase.
XX KW RNA-binding protein; RBP; RNA replicase; RNA identification; telomerase;
XX KW ss.
XX OS Homo sapiens.
XX PN US6238867-B1.
XX PD 29-MAY-2001.
XX PF 22-FEB-1999; 99US-00255464.
XX PR 23-FEB-1998; 98US-0075495P.
XX PA (INVI-) INVITRO DIAGNOSTICS INC.
XX PI Roninson IB, Grossman A;
XX WPI; 2001-366472/38.
XX PT New ribonucleic acids useful for identifying naturally occurring RNA
XX PT sequences having affinity for RNA-binding protein having protein and RNA
XX PT components.
XX PS Example 2; Col 26; 36pp; English.
XX CC The specification describes a first RNA (RNA1) and a second RNA (RNA2)
XX CC for use in binding an RNA-binding protein (RBP) having protein and RNA
XX CC components. RNA1 has the formula 5'-A-B-C-3', where A is section having
XX CC 10-100,000 nucleotides and is can be received by an RNA replicase and
XX CC with another DNA sequence, F, being replicated; B is section having 10-
XX CC 3,000 nucleotides which have affinity to one consensus sequence of the
XX CC RBP and which can bind to the protein component; C is section having
XX CC about 1-20 nucleotides and which can be ligated to D of the second RNA
XX CC molecule. RNA2 has the formula 5'-D-E-F-3', where D is section having 1-
XX CC 20 nucleotides and which can be ligated to C; E is section 10-3,000
XX CC nucleotides which have affinity to second consensus sequence of the RBP
XX CC and which can bind to the protein component; F is section having 10-
XX CC 100,000 nucleotides which can be received by an RNA replicase and with A
XX CC being replicated. RNA1 and RNA2 are capable of forming a third RNA (RNA3)
XX CC of formula 5'A-B-C-D-E-F-3'. The method is useful for the identification
XX CC and characterization of RNA sequences having specific affinity to amino
XX CC acid consensus sequences of RBP, and to RNAs. AAH24815-16 were used to
XX CC produce a double-stranded RNA1, comprising the Y-1 domain of human
XX CC telomerase
XX SQ Sequence 66 BP; 10 A; 11 C; 28 G; 17 T; 0 U; 0 Other;
Query Match      2.8%; Score 12.8; DB 1; Length 66;
Best Local Similarity 70.8%; Pred. No. 3e+02;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 222 TCGCCTGCCAGCCCGAACC 245
Db 29 TCCAGGCCACCCCTCGCAACC 6

RESULT 488
ADG98448/C
ID ADG98448 standard; DNA; 15 BP.
XX AC ADG98448;
XX DT 11-MAR-2004 (first entry)
XX DE Human CETP gene allele specific oligonucleotide PCR primer #21.
XX KW human; cholesterol ester transfer protein; CETP;
XX KW single nucleotide polymorphism; SNP; drug screening; atherosclerosis;
XX KW cardiovascular disease; hypercholesterolaemia;
XX KW allele specific oligonucleotide; ss; PCR; primer.
XX OS Homo sapiens.
XX PN WO2003091277-A2.
XX PD 06-NOV-2003.
XX PF 28-APR-2003; 2003WO-US013288.
XX PR 26-APR-2002; 2002US-0375791P.
XX PA (GENA-) GENAISSANCE PHARM INC.
XX PI Anastasio AE, Chew A, Kazemi A, Lachowicz M, Lee HH, Parks KE;
XX PI Petersen N, Rounds E, Sausker EA, Tirrell C;
XX DR WPI; 2003-865576/80.
XX PT New isolated polynucleotide useful for haplotyping and/or genotyping
XX PT cholesterol ester transfer protein (CETP) gene in an individual or in
XX PT screening for drugs useful in treating diseases associated with CETP
XX PT activity.
XX PS Claim 43; SEQ ID NO 80; 250pp; English.
XX CC The invention comprises the amino acid and coding sequences of the human
XX CC cholesterol ester transfer protein (CETP), the invention also comprises
XX CC polymorphisms identified within the CETP gene. The DNA and protein
XX CC sequences of the invention are useful in haplotyping and/or genotyping
XX CC the CETP gene in an individual. The DNA and protein sequences may also be
XX CC used to screen drugs or compounds targeting the CETP or its variant to
XX CC treat a condition or disease associated with CETP (e.g. atherosclerosis,
XX CC cardiovascular disease or hypercholesterolaemia). The present DNA
XX CC sequence represents an allele specific oligonucleotide PCR primer for the
XX CC human CETP gene.
XX SQ Sequence 15 BP; 0 A; 2 C; 10 G; 2 T; 0 U; 1 Other;
Query Match      2.8%; Score 12.6; DB 1; Length 15;
Best Local Similarity 92.3%; Pred. No. 3.6e+02;
Matches 12; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 226 CTGCCAGCCGCC 238
Db 15 CYGCCAGCCGCC 3

Search completed: August 24, 2005, 14:24:50
Job time : 5 secs
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GenCore version 5.1.6  
Copyright (c) 1993 - 2005 Compugen Ltd.

OM nucleic - nucleic search, using sw model

Run on: August 24, 2005, 14:51:46 ; Search time 0.001 Seconds  
(without alignments)  
17.138 Million cell updates/sec

Title: US-09-436-060A-16  
Perfect score: 451  
Sequence: 1 99gttgaggaggtggcct.....aggactggctcacacatgc 451

Scoring table: IDENTITY NUC  
Gapop 10.0 , Gapext 0.5

Searched: 1 segs, 19 residues

Total number of hits satisfying chosen parameters: 2

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 2 summaries

Database : rst.subdb.\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

Result No.	Score	Match	Length	DB ID	Description
1	14.4	3.2	19	1 AA934303	ACCESSION:AA934303
2	8.8	2.0	19	1 AA934303	ACCESSION:AA934303

#### ALIGNMENTS

RESULT 1  
AA934303  
LOCUS  
DEFINITION  
AA934303 19 bp mRNA linear EST 26-MAR-1999  
SMOVL3CAN12H12 Onchocerca volvulus infective larva cDNA  
(SAW94WL-OvL3) Onchocerca volvulus cDNA clone onch672 5' similar to  
TR:Q33571 Q33571 ATPASE SUBUNIT 6 ;, mRNA sequence.

ACCESSION  
AA934303

VERSION  
AA934303.1 GI:3091460

KEYWORDS  
EST.

SOURCE  
Onchocerca volvulus

ORGANISM  
Onchocerca volvulus

REFERENCE  
1 (bases 1 to 19)

AUTHORS  
Williams, S.A., Lizotte-Waniewski, M., Laney, S., Wenhong, L., Hillier, L., Allen, M., Bowles, L., Geisel, S., Jost, S., Kucaba, T., Martin, J., Steptoe, M., Theising, B., White, Y., Wylie, T., Chappell, J., Person, B., Gibbons, M., Harvey, N., Pape, D., Chamberlain, A., Morales, R., Schurk, R., Ritter, E., Kohn, S., Underwood, K. and Marra, M.

Unpublished (1998)

Contact: Steven A. Williams

Molecular Parasitology

Smith College Department of Biological Sciences

Department of Biological Sciences, Clark Science Center, Smith

College, Northampton, MA, 01063, USA

Tel: 4135853826

Fax: 4135853786

Email: genome@smith.edu

The library was constructed by Wenhong Lu. The library is available from Dr. S.A. Williams, email genome@smith.edu When requesting this clone from Dr. Williams, please reference the Williams lab clone id

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- SWOVL3CAN12H12
Seq primer: -40ml3 fwd. ET from Amersham
High quality sequence stop: 1.
FEATURES
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    1. .19
        Location/Qualifiers
            /organism="Onchocerca volvulus"
            /mol_type="mRNA"
            /strain="Sierra Leone"
            /db_xref="taxon:6282"
            /clone="onche72"
            /lab_host="XLI-Blue MRF"
            /clone_lib="Onchocerca volvulus infective larva cDNA
            (SAW94WL-Ovt3)"
            /note="Vector: lambda UniZap XR; Site 1: EcoR I; Site 2:
            Xho I; Cutaneous filarial nematode parasite of humans.
            mRNA was prepared from third stage infective larvae of
            Onchocerca volvulus isolated from mosquitoes 10 days after
            infection and converted to double stranded cDNA using
            reverse transcriptase and oligo(dT) followed by RNase H
            and DNAPol I. The library had 1.8 x 10E5 independent
            recombinants and average insert size was 900 base pairs.
            The library was constructed by Wenhong Lu. The library is
            available from Dr. S.A. Williams, email genome@smith.edu."
```

```
Query Match      2.0%; Score 8.8; DB 1; Length 19;
Best Local Similarity 83.3%; Pred. No. 0;
Matches 10; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY      36 CATTTCCTCT 47
        |||||
Db       17 CTTTTCCTCT 6
```

Search completed: August 24, 2005, 14:51:46  
Job time : 0.001 secs



GenCore version 5.1.6  
Copyright (c) 1993 - 2005 CompuGen Ltd.

OM nucleic - nucleic search, using sw model

Run on: August 24, 2005, 14:28:58 ; Search time 1 Seconds  
(without alignments)  
4.890 Million cell updates/sec

Title: US-09-436-060A-16

Perfect score: 451

Sequence: 1 99gtgggggggtggcct.....aggactggctcacatgc 451

Scoring table: IDENTITY NUC

Gapop 10.0 , Gapext 0.5

Searched: 252 seqs, 5421 residues

Total number of hits satisfying chosen parameters: 504

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 257 summaries

Database : rni.subdb:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

# SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
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C 2	54	12.0	62	1	US-09-255-464B-16
C 3	54	12.0	66	1	US-08-873-709-19
4	54	12.0	66	1	US-09-255-464B-15
5	31	6.9	31	1	US-08-838-545-49
6	31	6.9	31	1	US-09-349-532-49
C 7	31	6.9	31	1	US-09-717-828B-1
C 8	31	6.9	31	1	US-09-717-829A-1
C 9	31	6.9	31	1	US-10-330-872-1
C 10	30	6.7	30	1	US-08-330-123A-22
C 11	30	6.7	30	1	US-08-482-115B-22
C 12	30	6.7	30	1	US-08-660-678A-22
C 13	30	6.7	30	1	US-08-770-565-5
C 14	30	6.7	30	1	US-08-770-565-8
C 15	30	6.7	30	1	US-08-485-778-18
C 16	30	6.7	30	1	US-08-472-802C-23
C 17	30	6.7	30	1	US-08-520-550A-18
C 18	30	6.7	30	1	US-08-998-443-22
C 19	30	6.7	30	1	US-09-060-523-22
C 20	30	6.7	30	1	US-09-580-517-22
C 21	30	6.7	30	1	US-09-717-828B-4
C 22	30	6.7	30	1	US-09-717-828B-5
C 23	30	6.7	30	1	US-09-717-829A-5
C 24	30	6.7	30	1	US-09-057-351-22
C 25	30	6.7	30	1	US-09-903-461-2
C 26	30	6.7	30	1	US-10-330-872-4
C 27	30	6.7	30	1	US-10-330-872-5
C 28	30	6.4	30	1	US-08-833-377-2
C 29	29	6.4	30	1	US-08-833-377-5
C 30	29	6.4	30	1	US-08-833-377-6
C 31	29	6.4	30	1	US-08-717-828B-3
C 32	28.4	6.3	30	1	US-09-717-829A-3
C 33	28.4	6.3	30	1	Sequence 3, Appli

1	US-10-330-872-3	30	6.3	28.4	C 34	Sequence 3, Appli
28	US-09-286-959B-3	28	6.2	27.4	C 35	Sequence 3, Appli
30	US-08-833-377-4	30	6.1	27.4	C 36	Sequence 4, Appli
27	US-08-770-565-26	27	6.0	27	C 37	Sequence 26, Appli
27	US-08-974-180-32	27	6.0	27	C 38	Sequence 32, Appli
28	US-08-482-115B-31	28	5.9	26.4	C 39	Sequence 31, Appli
28	US-08-482-115B-40	28	5.9	26.4	C 40	Sequence 40, Appli
28	US-08-472-802C-38	28	5.9	26.4	C 41	Sequence 38, Appli
26	US-08-330-123A-23	26	5.8	26	C 42	Sequence 23, Appli
26	US-08-482-115B-23	26	5.8	26	C 43	Sequence 23, Appli
26	US-08-482-115B-29	26	5.8	26	C 44	Sequence 23, Appli
26	US-08-660-678A-23	26	5.8	26	C 45	Sequence 23, Appli
26	US-08-770-565-25	26	5.8	26	C 46	Sequence 25, Appli
26	US-08-710-249-25	26	5.8	26	C 47	Sequence 25, Appli
26	US-08-710-249-26	26	5.8	26	C 48	Sequence 26, Appli
26	US-08-485-778-19	26	5.8	26	C 49	Sequence 19, Appli
26	US-08-472-802C-24	26	5.8	26	C 50	Sequence 24, Appli
26	US-08-472-802C-30	26	5.8	26	C 51	Sequence 30, Appli
26	US-08-520-550A-19	26	5.8	26	C 52	Sequence 19, Appli
26	US-08-974-180-33	26	5.8	26	C 53	Sequence 33, Appli
26	US-08-998-443-23	26	5.8	26	C 54	Sequence 23, Appli
26	US-08-974-549A-597	26	5.8	26	C 55	Sequence 597, App
26	US-08-974-549A-598	26	5.8	26	C 56	Sequence 598, App
26	US-09-060-523-23	26	5.8	26	C 57	Sequence 23, Appli
26	US-09-220-157A-25	26	5.8	26	C 58	Sequence 25, Appli
26	US-09-220-157A-26	26	5.8	26	C 59	Sequence 26, Appli
26	US-09-286-959B-4	26	5.8	26	C 60	Sequence 4, Appli
26	US-09-580-517-23	26	5.8	26	C 61	Sequence 23, Appli
26	US-08-912-951-311	26	5.8	26	C 62	Sequence 311, App
26	US-08-912-951-312	26	5.8	26	C 63	Sequence 312, App
26	US-09-057-351-23	26	5.8	26	C 64	Sequence 23, Appli
26	US-09-057-351-30	26	5.8	26	C 65	Sequence 30, Appli
26	US-09-653-573-4	26	5.8	26	C 66	Sequence 4, Appli
26	US-09-653-573-5	26	5.8	26	C 67	Sequence 5, Appli
26	US-09-402-181B-597	26	5.8	26	C 68	Sequence 597, App
26	US-09-402-181B-598	26	5.8	26	C 69	Sequence 598, App
26	US-09-721-456-597	26	5.8	26	C 70	Sequence 597, App
26	US-09-721-456-598	26	5.8	26	C 71	Sequence 598, App
25	US-08-630-019A-26	25	5.5	25	C 72	Sequence 26, Appli
25	US-08-630-019A-36	25	5.5	25	C 73	Sequence 36, Appli
25	US-08-838-545-40	25	5.5	25	C 74	Sequence 40, Appli
25	US-09-349-532-40	25	5.5	25	C 75	Sequence 40, Appli
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25	US-08-472-802C-29	25	5.5	25	C 77	Sequence 29, Appli
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24	US-08-770-565-2	24	5.4	24	C 79	Sequence 2, Appli
24	US-08-838-545-25	24	5.3	24	C 80	Sequence 25, Appli
24	US-09-349-532-25	24	5.3	24	C 81	Sequence 25, Appli
24	US-09-018-125-4	24	5.3	24	C 82	Sequence 4, Appli
24	US-09-018-125-5	24	5.3	24	C 83	Sequence 5, Appli
23	US-08-838-545-26	23	5.1	23	C 84	Sequence 26, Appli
23	US-09-349-532-26	23	5.1	23	C 85	Sequence 26, Appli
23	US-08-485-778-20	23	5.1	23	C 86	Sequence 20, Appli
23	US-08-520-550A-20	23	5.1	23	C 87	Sequence 20, Appli
22	US-08-330-123A-5	22	4.9	22	C 88	Sequence 5, Appli
22	US-08-330-123A-6	22	4.9	22	C 89	Sequence 6, Appli
22	US-08-482-115B-32	22	4.9	22	C 90	Sequence 32, Appli
22	US-08-660-678A-27	22	4.9	22	C 91	Sequence 27, Appli
22	US-08-660-678A-28	22	4.9	22	C 92	Sequence 28, Appli
22	US-08-485-778-7	22	4.9	22	C 93	Sequence 7, Appli
22	US-08-485-778-8	22	4.9	22	C 94	Sequence 8, Appli
22	US-08-472-802C-37	22	4.9	22	C 95	Sequence 37, Appli
22	US-08-472-802C-42	22	4.9	22	C 96	Sequence 42, Appli
22	US-08-472-802C-43	22	4.9	22	C 97	Sequence 43, Appli
22	US-08-520-550A-7	22	4.9	22	C 98	Sequence 7, Appli
22	US-08-520-550A-8	22	4.9	22	C 99	Sequence 8, Appli
22	US-08-998-443-27	22	4.9	22	C 100	Sequence 27, Appli
22	US-08-998-443-28	22	4.9	22	C 101	Sequence 28, Appli
22	US-09-580-517-5	22	4.9	22	C 102	Sequence 5, Appli
22	US-09-580-517-6	22	4.9	22	C 103	Sequence 6, Appli
22	US-09-717-828B-2	22	4.9	22	C 104	Sequence 2, Appli
22	US-08-717-829A-2	22	4.9	22	C 105	Sequence 2, Appli
22	US-09-057-351-41	22	4.9	22	C 106	Sequence 41, Appli

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c 108	22	4.9	22	1	US-10-330-872-2	Sequence 2, Appli	c 181	14	3.1	14	1	US-08-630-019A-25	Sequence 25, Appl
c 109	22	4.7	25	21	US-08-330-123A-25	Sequence 25, Appl	182	13.8	3.1	17	1	US-08-158-352-2	Sequence 2, Appli
c 110	21	4.7	21	1	US-08-482-115B-25	Sequence 25, Appl	183	13.8	3.1	17	1	US-09-108-911-2	Sequence 2, Appli
c 111	21	4.7	21	1	US-08-660-678A-25	Sequence 25, Appl	184	13.8	3.1	17	1	US-08-679-645-826	Sequence 826, App
c 112	21	4.7	21	1	US-08-485-778-33	Sequence 33, Appl	185	13.8	3.1	18	1	US-08-679-645-571	Sequence 571, App
c 113	21	4.7	21	1	US-08-472-802C-36	Sequence 26, Appl	186	13.4	3.0	17	1	US-09-586-376-11	Sequence 11, Appl
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c 116	21	4.7	21	1	US-09-060-523-25	Sequence 25, Appl	189	13.4	3.0	17	1	US-10-232-634-11	Sequence 11, Appl
c 117	21	4.7	21	1	US-09-580-517-25	Sequence 25, Appl	190	13.4	3.0	17	1	US-10-232-634-12	Sequence 12, Appl
c 118	21	4.7	21	1	US-08-057-351-25	Sequence 25, Appl	c 191	13	2.9	13	1	US-08-630-019A-11	Sequence 11, Appl
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c 125	20	4.4	20	1	US-08-660-678A-29	Sequence 29, Appl	c 198	13	2.9	13	1	US-08-838-545-46	Sequence 46, Appl
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c 131	20	4.4	20	1	US-08-485-778-9	Sequence 9, Appli	c 204	13	2.9	13	1	US-09-349-532-4	Sequence 4, Appli
c 132	20	4.4	20	1	US-08-472-802C-8	Sequence 8, Appli	c 205	13	2.9	13	1	US-09-349-532-12	Sequence 12, Appl
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c 139	20	4.4	20	1	US-08-998-443-7	Sequence 7, Appli	c 212	13	2.9	13	1	US-09-657-445A-8	Sequence 8, Appli
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c 141	20	4.4	20	1	US-08-998-443-29	Sequence 29, Appl	c 214	13	2.9	13	1	US-10-463-076-8	Sequence 8, Appli
c 142	20	4.4	20	1	US-09-060-523-7	Sequence 7, Appli	c 215	13	2.9	16	1	US-08-301-435-34	Sequence 34, Appl
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c 144	20	4.4	20	1	US-09-580-517-4	Sequence 4, Appli	c 217	12.8	2.8	17	1	US-08-679-645-828	Sequence 828, App
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c 147	20	4.4	20	1	US-09-057-351-40	Sequence 40, Appl	c 220	12.8	2.8	62	1	US-08-873-709-20	Sequence 20, Appl
c 148	19	4.2	19	1	US-08-770-565-9	Sequence 9, Appli	c 221	12.8	2.8	62	1	US-09-255-464B-16	Sequence 16, Appl
c 149	19	4.2	19	1	US-08-838-545-60	Sequence 60, Appl	c 222	12.8	2.8	66	1	US-08-873-709-19	Sequence 19, Appl
c 150	19	4.2	19	1	US-09-349-532-60	Sequence 60, Appl	c 223	12.8	2.8	66	1	US-09-255-464B-15	Sequence 15, Appl
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c 152	19	4.2	20	1	US-08-833-377-14	Sequence 14, Appl	c 225	12.4	2.7	16	1	US-09-328-174A-38	Sequence 38, Appl
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c 157	16.4	3.6	18	1	US-09-402-181B-543	Sequence 543, App	c 230	12	2.7	15	1	US-08-292-620A-396	Sequence 396, App
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c 159	16.2	3.6	21	1	US-08-026-143B-13	Sequence 13, Appl	c 232	12	2.7	15	1	US-09-071-845-396	Sequence 396, App
c 160	16.2	3.6	21	1	PCT-US92-10621-13	Sequence 13, Appl	c 233	12	2.7	15	1	US-09-071-845-591	Sequence 591, App
c 161	16.2	3.6	21	1	PCT-US94-02231-13	Sequence 13, Appl	c 234	12	2.7	15	1	US-09-081-646-720	Sequence 720, App
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c 165	15.2	3.4	20	1	US-09-596-938-11	Sequence 11, Appl	c 238	11.8	2.6	15	1	US-08-469-177-4	Sequence 4, Appli
c 166	15	3.3	15	1	US-08-770-565-10	Sequence 10, Appl	c 239	11.8	2.6	15	1	US-08-484-551-5	Sequence 5, Appli
c 167	15	3.3	15	1	US-08-630-019A-12	Sequence 12, Appl	c 240	11.8	2.6	15	1	US-08-484-551-5	Sequence 5, Appli
c 168	15	3.3	15	1	US-08-630-019A-18	Sequence 18, Appl	c 241	11.8	2.6	15	1	US-08-486-963-18	Sequence 18, Appl
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c 170	15	3.3	15	1	US-08-838-545-2	Sequence 2, Appli	c 243	11.8	2.6	15	1	US-08-294-424-35	Sequence 35, Appl
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c 172	15	3.3	15	1	US-08-838-545-28	Sequence 28, Appl	c 245	11.8	2.6	15	1	US-08-470-887A-10	Sequence 10, Appl
c 173	15	3.3	15	1	US-08-838-545-45	Sequence 45, Appl	c 246	11.8	2.6	15	1	US-08-292-620A-292	Sequence 292, App
c 174	15	3.3	15	1	US-09-349-532-2	Sequence 2, Appli	c 247	11.8	2.6	15	1	US-08-316-439A-8	Sequence 8, Appli
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c 176	15	3.3	15	1	US-09-349-532-28	Sequence 28, Appl	c 249	11.8	2.6	15	1	US-08-173-489C-141	Sequence 141, App
c 177	15	3.3	15	1	US-09-349-532-45	Sequence 45, Appl	c 250	11.8	2.6	15	1	US-08-550-120-3	Sequence 3, Appli
c 178	14.8	3.3	18	1	US-09-673-298-4	Sequence 4, Appli	c 251	11.8	2.6	15	1	US-09-106-377-10	Sequence 10, Appl
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253 11.8 2.6 15 1 US-08-871-732A-9 Sequence 9, Appli  
c 254 11.8 2.6 15 1 US-09-180-437-212 Sequence 212, App  
255 11.8 2.6 15 1 US-09-346-510B-9 Sequence 9, Appli  
256 11.8 2.6 15 1 US-09-544-934B-106 Sequence 106, App  
257 11.8 2.6 15 1 5166057-23 Patent No. 5166057

ALIGNMENTS

RESULT 1  
US-08-873-709-20/c  
; Sequence 20, Application US/08873709  
; Patent No. 6037126  
; GENERAL INFORMATION:  
; APPLICANT: Grossman, Abraham  
; TITLE OF INVENTION: COMPOSITIONS, METHODS, KITS AND  
; TITLE OF INVENTION: APPARATUS FOR DETERMINING THE PRESENCE OR ABSENCE OF  
; TITLE OF INVENTION: PROTEIN COMPONENT OF TELOMERASE ENZYME  
; NUMBER OF SEQUENCES: 25  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Abraham Grossman  
; STREET: 666 Washington Avenue  
; CITY: Pleasantville  
; STATE: NY  
; COUNTRY: USA  
; ZIP: 10570  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.30  
; CURRENT APPLICATION NUMBER: US/08/873,709  
; FILING DATE: 12-JUN-1997  
; CLASSIFICATION: 435  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Janiuk, Anthony J.  
; REGISTRATION NUMBER: 29,809  
; REFERENCE/DOCKET NUMBER: Q001/002  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: 914-747-9108  
; INFORMATION FOR SEQ ID NO: 20:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 62 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: DNA  
US-08-873-709-20

Query Match 12.0%; Score 54; DB 1; Length 62;  
Best Local Similarity 100.0%; Pred. No. 0.74; Mismatches 0; Indels 0; Gaps 0;  
Matches 54; Conservative 0; Indels 0; Gaps 0;  
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Db 61 GGGTTGGAGGGTGGGCTGGAGGGGTGGTGGCCATTTTGTCTAACCCCTA 8

RESULT 2  
US-09-255-464B-16/c  
; Sequence 16, Application US/09255464B  
; Patent No. 6238867  
; GENERAL INFORMATION:  
; APPLICANT: Roninson, Igor  
; APPLICANT: Grossman, Abraham  
; TITLE OF INVENTION: Compositions, Methods, Kits and Apparatus for  
; TITLE OF INVENTION: Identifying Naturally Occurring RNA Sequences Having  
; TITLE OF INVENTION: Affinity for RNA-Binding Proteins  
; FILE REFERENCE: Q001/004a  
; CURRENT APPLICATION NUMBER: US/09/255.464B  
; CURRENT FILING DATE: 1999-02-22

; PRIOR APPLICATION NUMBER: 60/075,495  
; PRIOR FILING DATE: 1998-02-23  
; NUMBER OF SEQ ID NOS: 25  
; SOFTWARE: PatentIn Ver. 2.0  
; SEQ ID NO 16  
; LENGTH: 62  
; TYPE: DNA  
; ORGANISM: Homo sapiens  
US-09-255-464B-16

Query Match 12.0%; Score 54; DB 1; Length 62;  
Best Local Similarity 100.0%; Pred. No. 0.74; Mismatches 0; Indels 0; Gaps 0;  
Matches 54; Conservative 0; Indels 0; Gaps 0;  
Qy 1 GGGTTGGAGGGTGGGCTGGAGGGGTGGTGGCCATTTTGTCTAACCCCTA 54  
Db 61 GGGTTGGAGGGTGGGCTGGAGGGGTGGTGGCCATTTTGTCTAACCCCTA 8

RESULT 3  
US-08-873-709-19  
; Sequence 19, Application US/08873709  
; Patent No. 6037126  
; GENERAL INFORMATION:  
; APPLICANT: Grossman, Abraham  
; TITLE OF INVENTION: COMPOSITIONS, METHODS, KITS AND  
; TITLE OF INVENTION: APPARATUS FOR DETERMINING THE PRESENCE OR ABSENCE OF  
; TITLE OF INVENTION: PROTEIN COMPONENT OF TELOMERASE ENZYME  
; NUMBER OF SEQUENCES: 25  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Abraham Grossman  
; STREET: 666 Washington Avenue  
; CITY: Pleasantville  
; STATE: NY  
; COUNTRY: USA  
; ZIP: 10570  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.30  
; CURRENT APPLICATION NUMBER: US/08/873,709  
; FILING DATE: 12-JUN-1997  
; CLASSIFICATION: 435  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Janiuk, Anthony J.  
; REGISTRATION NUMBER: 29,809  
; REFERENCE/DOCKET NUMBER: Q001/002  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: 914-747-9108  
; INFORMATION FOR SEQ ID NO: 19:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 66 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: DNA  
US-08-873-709-19

Query Match 12.0%; Score 54; DB 1; Length 66;  
Best Local Similarity 100.0%; Pred. No. 0.81; Mismatches 0; Indels 0; Gaps 0;  
Matches 54; Conservative 0; Indels 0; Gaps 0;  
Qy 1 GGGTTGGAGGGTGGGCTGGAGGGGTGGTGGCCATTTTGTCTAACCCCTA 54  
Db 6 GGGTTGGAGGGTGGGCTGGAGGGGTGGTGGCCATTTTGTCTAACCCCTA 59  
..

RESULT 4  
US-09-255-464B-15  
; Sequence 15, Application US/09255464B  
; Patent No. 6238867

```
;      MOLECULE TYPE: RNA (genomic)
US-08-838-545-49

Query Match          6.9%; Score 31; DB 1; Length 31;
Best Local Similarity 71.0%; Pred. No. 20;
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY    40 TTTTGTCTAACCCCTAACTGAGAAGGGCGTAG 70
       ::::|:|:|:|:|:|:|:|:|:|:|:|:|:|:|:|
DB    1 UUUUGUUAACCCCUAACUGAGAAGGGCGUAG 31

RESULT 6
US-09-349-532-49
; Sequence 49, Application US/09349532
; Patent No. 6294650
; GENERAL INFORMATION:
; APPLICANT: Shay, Jerry W.
; APPLICANT: Wright, Woodring E.
; APPLICANT: Piatyszek, Mięczysław A.
; APPLICANT: Corey, David R.
; APPLICANT: No. 6294650ton, James C.
; TITLE OF INVENTION: Modulation of Mamalian Telomerase by
;   NUMBER OF SEQUENCES: 60
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IEM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/349,532
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/838,545
; FILING DATE: 09-APR-1997
; APPLICATION NUMBER: US 08/630,019
; FILING DATE: 09-APR-1996
; ATTORNEY/AGENT INFORMATION:
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-001610US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 49:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 31 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: RNA (genomic)
US-09-349-532-49

Query Match          6.9%; Score 31; DB 1; Length 31;
Best Local Similarity 71.0%; Pred. No. 20;
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY    40 TTTTGTCTAACCCCTAACTGAGAAGGGCGTAG 70
       ::::|:|:~|:|:|:|:|:|:|:|:|:|:|:|:|
DB    1 UUUUGUUAACCCCUAACUGAGAAGGGCGUAG 31

RESULT 7
US-09-717-828B-1/c
```

```
; Sequence 1, Application US/09717828B
; Patent No. 6517834
; GENERAL INFORMATION:
; APPLICANT: Weinrich, Scott L
; APPLICANT: Atkinson III, Edward M
; APPLICANT: Lichtsteiner, Serge P
; APPLICANT: Vasserot, Alain P
; APPLICANT: Pruzan, Ronald A
; TITLE OF INVENTION: A Method for Purifying Telomerase
; FILE REFERENCE: PurifiedTelomerase01base
; CURRENT APPLICATION NUMBER: US/09/717,828B
; CURRENT FILING DATE: 2000-11-20
; PRIOR APPLICATION NUMBER: 09/420,056
; PRIOR FILING DATE: 1999-10-18
; PRIOR APPLICATION NUMBER: 08/833,377
; PRIOR FILING DATE: 1997-04-04
; PRIOR APPLICATION NUMBER: 08/510,736
; PRIOR FILING DATE: 1995-08-04
; NUMBER OF SEQ ID NOS: 11
; SOFTWARE: PatentIn Ver. 2.1 edited
; SEQ ID NO 1
; LENGTH: 31
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (1)
; OTHER INFORMATION: Biotin 5'-terminal
; NAME/KEY: misc_feature
; LOCATION: (31)
; OTHER INFORMATION: Biotin 3'-terminal
; OTHER INFORMATION: Description of Artificial Sequence: Affinity Agent
US-09-717-828B-1

Query Match          6.9%; Score 31; DB 1; Length 31;
Best Local Similarity 100.0%; Pred. No. 20;
Matches 31; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 42 TTGTCTAACCTAACTGAGAGGGCGTAGGC 72
      |||||
Db 31 TTGTCTAACCTAACTGAGAGGGCGTAGGC 1

RESULT 8
US-09-717-829A-1/c
; Sequence 1, Application US/09717829A
; Patent No. 6545133
; GENERAL INFORMATION:
; APPLICANT: Weinrich, Scott L
; APPLICANT: Atkinson III, Edward M
; APPLICANT: Lichtsteiner, Serge P
; APPLICANT: Vasserot, Alain P
; APPLICANT: Pruzan, Ronald A
; TITLE OF INVENTION: A Method for Purifying Telomerase
; FILE REFERENCE: PurifiedTelomerase01base
; CURRENT APPLICATION NUMBER: US/09/717,829A
; CURRENT FILING DATE: 2000-11-20
; PRIOR APPLICATION NUMBER: 09/420,056
; PRIOR FILING DATE: 1999-10-18
; PRIOR APPLICATION NUMBER: 08/833,377
; PRIOR FILING DATE: 1997-04-04
; PRIOR APPLICATION NUMBER: 08/510,736
; PRIOR FILING DATE: 1995-08-04
; NUMBER OF SEQ ID NOS: 11
; SOFTWARE: PatentIn Ver. 2.1 edited
; SEQ ID NO 1
; LENGTH: 31
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (1)
; OTHER INFORMATION: Biotin 5'-terminal
; OTHER INFORMATION: Description of Artificial Sequence: Affinity Agent
US-09-717-829A-1
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; NAME/KEY: misc_feature
; LOCATION: (31)
; OTHER INFORMATION: Biotin 3'-terminal
; OTHER INFORMATION: Description of Artificial Sequence: Affinity Agent
US-09-717-829A-1

Query Match          6.9%; Score 31; DB 1; Length 31;
Best Local Similarity 100.0%; Pred. No. 20;
Matches 31; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 42 TTGTCTAACCTAACTGAGAGGGCGTAGGC 72
      |||||
Db 31 TTGTCTAACCTAACTGAGAGGGCGTAGGC 1

RESULT 9
US-10-330-872-1/c
; Sequence 1, Application US/10330872
; Patent No. 6787133
; GENERAL INFORMATION:
; APPLICANT: Geron Corporation
; APPLICANT: Weinrich, Scott
; APPLICANT: Atkinson III, Edward
; APPLICANT: Lichtsteiner, Serge
; APPLICANT: Vasserot, Alain
; APPLICANT: Pruzan, Ronald
; TITLE OF INVENTION: Using Purified Telomerase to Identify Telomerase Activators and
; FILE REFERENCE: 011/006C
; CURRENT APPLICATION NUMBER: US/10/330,872
; CURRENT FILING DATE: 2002-12-24
; PRIOR APPLICATION NUMBER: 08/510,736
; PRIOR FILING DATE: 1995-08-04
; PRIOR APPLICATION NUMBER: 08/833,377
; PRIOR FILING DATE: 1997-04-04
; PRIOR APPLICATION NUMBER: 09/420,056
; PRIOR FILING DATE: 1999-10-18
; PRIOR APPLICATION NUMBER: 09/717,828
; PRIOR FILING DATE: 2000-11-20
; NUMBER OF SEQ ID NOS: 11
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 1
; LENGTH: 31
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-330-872-1

Query Match          6.9%; Score 31; DB 1; Length 31;
Best Local Similarity 100.0%; Pred. No. 20;
Matches 31; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 42 TTGTCTAACCTAACTGAGAGGGCGTAGGC 72
      |||||
Db 31 TTGTCTAACCTAACTGAGAGGGCGTAGGC 1

RESULT 10
US-08-330-123A-22/c
; Sequence 22, Application US/08330123A
; Patent No. 5583016
; GENERAL INFORMATION:
; APPLICANT: VILLEPONTEAU, Bryant
; APPLICANT: FENG, Junli
; APPLICANT: FUNK, Walter
; APPLICANT: ANDREWS, William H.
; TITLE OF INVENTION: HUMAN TELOMERASE
; NUMBER OF SEQUENCES: 25
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend Kourie and Crew
; STREET: 379 Lytton Avenue
; CITY: Palo Alto
; STATE: California
; COUNTRY: US
```

/ ZIP: 94301  
/ COMPUTER READABLE FORM:  
/ MEDIUM TYPE: Floppy disk  
/ COMPUTER: IBM PC compatible  
/ OPERATING SYSTEM: PC-DOS/MS-DOS  
/ SOFTWARE: PatentIn Release #1.0, Version #1.25  
/ CURRENT APPLICATION DATA:  
/ APPLICATION NUMBER: US/08/330,123A  
/ FILING DATE: 27-OCT-1994  
/ CLASSIFICATION: 435  
/ PRIOR APPLICATION DATA:  
/ APPLICATION NUMBER: US 08/272,102  
/ FILING DATE: 07-JUL-1994  
/ ATTORNEY/AGENT INFORMATION:  
/ NAME: Smith, William M  
/ REGISTRATION NUMBER: 30,223  
/ REFERENCE/DOCKET NUMBER: 15389-000810  
/ TELECOMMUNICATION INFORMATION:  
/ TELEPHONE: (415) 326-2400  
/ TELEFAX: (415) 326-2422  
/ INFORMATION FOR SEQ ID NO: 22:  
/ SEQUENCE CHARACTERISTICS:  
/ LENGTH: 30 base pairs  
/ TYPE: nucleic acid  
/ STRANDEDNESS: single  
/ TOPOLOGY: linear  
/ MOLECULE TYPE: DNA  
US-08-330-123A-22

Query Match 6.7%; Score 30; DB 1; Length 30;  
Best Local Similarity 100.0%; Pred. No. 23;  
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 77 TGCCTTTGCTCCCGCGCGCTGTTTTCTC 106  
Db 30 TGCCTTTGCTCCCGCGCGCTGTTTTCTC 1

RESULT 11  
US-08-482-115B-22/c  
/ Sequence 22, Application US/08482115B  
/ Patent No. 5776679  
/ GENERAL INFORMATION:  
/ APPLICANT: Villeponteau, Bryant  
/ APPLICANT: Funk, Junli  
/ APPLICANT: Funk, Walter  
/ APPLICANT: Andrews, William H.  
/ TITLE OF INVENTION: Assays for the RNA Component of Human  
/ TITLE OF INVENTION: Telomerase  
/ NUMBER OF SEQUENCES: 40  
/ CORRESPONDENCE ADDRESS:  
/ ADDRESSEE: Townsend and Townsend and Crew LLP  
/ STREET: Two Embarcadero Center, Eighth Floor  
/ CITY: San Francisco  
/ STATE: California  
/ COUNTRY: USA  
/ ZIP: 94111-3834  
/ COMPUTER READABLE FORM:  
/ MEDIUM TYPE: Floppy disk  
/ COMPUTER: IBM PC compatible  
/ OPERATING SYSTEM: PC-DOS/MS-DOS  
/ SOFTWARE: PatentIn Release #1.0, Version #1.30  
/ CURRENT APPLICATION DATA:  
/ APPLICATION NUMBER: US/08/482,115B  
/ FILING DATE: 07-JUN-1995  
/ CLASSIFICATION: 435  
/ PRIOR APPLICATION DATA:  
/ APPLICATION NUMBER: US 08/272,102  
/ FILING DATE: 07-JUL-1994  
/ PRIOR APPLICATION DATA:  
/ APPLICATION NUMBER: US 08/330,123  
/ FILING DATE: 27-OCT-1994  
/ ATTORNEY/AGENT INFORMATION:

/ NAME: Storella, John R.  
/ REGISTRATION NUMBER: 32,944  
/ REFERENCE/DOCKET NUMBER: 015389-000830US  
/ TELECOMMUNICATION INFORMATION:  
/ TELEPHONE: (415) 576-0200  
/ TELEFAX: (415) 576-0300  
/ INFORMATION FOR SEQ ID NO: 22:  
/ SEQUENCE CHARACTERISTICS:  
/ LENGTH: 30 base pairs  
/ TYPE: nucleic acid  
/ STRANDEDNESS: single  
/ TOPOLOGY: linear  
/ MOLECULE TYPE: DNA  
US-08-482-115B-22

Query Match 6.7%; Score 30; DB 1; Length 30;  
Best Local Similarity 100.0%; Pred. No. 23;  
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 77 TGCCTTTGCTCCCGCGCGCTGTTTTCTC 106  
Db 30 TGCCTTTGCTCCCGCGCGCTGTTTTCTC 1

RESULT 12  
US-08-660-678A-22/c  
/ Sequence 22, Application US/08660678A  
/ Patent No. 5837857  
/ GENERAL INFORMATION:  
/ APPLICANT: Villeponteau, Bryant  
/ APPLICANT: Funk, Junli  
/ APPLICANT: Funk, Walter  
/ APPLICANT: Andrews, William H.  
/ TITLE OF INVENTION: Mammalian Telomerase  
/ NUMBER OF SEQUENCES: 30  
/ CORRESPONDENCE ADDRESS:  
/ ADDRESSEE: Townsend and Townsend and Crew LLP  
/ STREET: Two Embarcadero Center, Eighth Floor  
/ CITY: San Francisco  
/ STATE: California  
/ COUNTRY: USA  
/ ZIP: 94111-3834  
/ COMPUTER READABLE FORM:  
/ MEDIUM TYPE: Floppy disk  
/ COMPUTER: IBM PC compatible  
/ OPERATING SYSTEM: PC-DOS/MS-DOS  
/ SOFTWARE: PatentIn Release #1.0, Version #1.30  
/ CURRENT APPLICATION DATA:  
/ APPLICATION NUMBER: US/08/660,678A  
/ FILING DATE: 05-JUN-1996  
/ CLASSIFICATION: 435  
/ PRIOR APPLICATION DATA:  
/ APPLICATION NUMBER: US 08/330,123  
/ FILING DATE: 27-OCT-1994  
/ PRIOR APPLICATION DATA:  
/ APPLICATION NUMBER: US 08/272,102  
/ FILING DATE: 07-JUL-1994  
/ ATTORNEY/AGENT INFORMATION:  
/ NAME: Storella, John R.  
/ REGISTRATION NUMBER: 32,944  
/ REFERENCE/DOCKET NUMBER: 015389-000811US  
/ TELECOMMUNICATION INFORMATION:  
/ TELEPHONE: (415) 576-0200  
/ TELEFAX: (415) 576-0300  
/ INFORMATION FOR SEQ ID NO: 22:  
/ SEQUENCE CHARACTERISTICS:  
/ LENGTH: 30 base pairs  
/ TYPE: nucleic acid  
/ STRANDEDNESS: single  
/ TOPOLOGY: linear  
/ MOLECULE TYPE: DNA  
US-08-660-678A-22

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Query Match      6.7%; Score 30; DB 1; Length 30;
Best Local Similarity 100.0%; Pred. No. 23;
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 77 TGCCTTTGCTCCCGCGCGCTGTTTCTC 106
Db 30 TGCCTTTGCTCCCGCGCGCTGTTTCTC 1

RESULT 13
US-08-770-565-5/c
; Sequence 5, Application US/08770565
; Patent No. 5846723
; GENERAL INFORMATION:
; APPLICANT: Kim, Nam Woo
; APPLICANT: Wu, Fred
; APPLICANT: Kealey, James T.
; APPLICANT: Pruzan, Ronald
; APPLICANT: Weinrich, Scott L.
; TITLE OF INVENTION: Methods for Detecting the RNA Component of
; TITLE OF INVENTION: Telomerase
; NUMBER OF SEQUENCES: 26
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: TOWNSEND and TOWNSEND and CREW LLP
; STREET: Two Embarcadero Center, 8th Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/770,565
; FILING DATE: 20-DEC-1996
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-002300US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 415-576-0200
; TELEFAX: 415-576-0300
; INFORMATION FOR SEQ ID NO: 5:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 30 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
US-08-770-565-5

Query Match      6.7%; Score 30; DB 1; Length 30;
Best Local Similarity 100.0%; Pred. No. 23;
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 290 CTGCCACCGCAAGAGTTGGGCTGTTCAG 319
Db 30 CTGCCACCGCAAGAGTTGGGCTGTTCAG 1

RESULT 14
US-08-770-565-8/c
; Sequence 8, Application US/08770565
; Patent No. 5846723
; GENERAL INFORMATION:
; APPLICANT: Kim, Nam Woo
; APPLICANT: Wu, Fred
; APPLICANT: Kealey, James T.
; APPLICANT: Pruzan, Ronald
; APPLICANT: Weinrich, Scott L.
```

```
; TITLE OF INVENTION: Methods for Detecting the RNA Component of
; TITLE OF INVENTION: Telomerase
; NUMBER OF SEQUENCES: 26
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: TOWNSEND and TOWNSEND and CREW LLP
; STREET: Two Embarcadero Center, 8th Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/770,565
; FILING DATE: 20-DEC-1996
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-002300US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 415-576-0200
; TELEFAX: 415-576-0300
; INFORMATION FOR SEQ ID NO: 8:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 30 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
US-08-770-565-8

Query Match      6.7%; Score 30; DB 1; Length 30;
Best Local Similarity 100.0%; Pred. No. 23;
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 137 CCTGCCCGCTTCCACCGTTTCATTCTAGAGC 166
Db 30 CCTGCCCGCTTCCACCGTTTCATTCTAGAGC 1

RESULT 15
US-08-485-778-18/c
; Sequence 18, Application US/08485778
; Patent No. 5876979
; GENERAL INFORMATION:
; APPLICANT: Andrews, William H.
; APPLICANT: Avilion, Ariel Athena
; APPLICANT: Feng, Junli
; APPLICANT: Funk, Walter
; APPLICANT: Greider, Carol
; APPLICANT: Marhuenda, Maria Antonia Blasco
; APPLICANT: Villeponteau, Bryant
; TITLE OF INVENTION: RNA COMPONENT OF TELOMERASE
; NUMBER OF SEQUENCES: 45
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Hamilton, Brook, Smith & Reynolds, P.C.
; STREET: Two Militia Drive
; CITY: Lexington
; STATE: MA
; COUNTRY: US
; ZIP: 02173
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/485,778
; FILING DATE: 07-JE-1995
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; CLASSIFICATION: 435
; PRIOR APPLICATION DATA: US 08/387,524
; APPLICATION NUMBER: US 08/387,524
; FILING DATE: 13-FEB-1995
; PRIOR APPLICATION DATA: US 08/330,123
; APPLICATION NUMBER: US 08/330,123
; FILING DATE: 27-OCT-1994
; PRIOR APPLICATION DATA: US 08/272,102
; APPLICATION NUMBER: US 08/272,102
; FILING DATE: 07-JUL-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: Granahan, Patricia
; REGISTRATION NUMBER: 32,227
; REFERENCE/DOCKET NUMBER: CSHL94-05A4
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617-861-6240
; TELEFAX: 617-861-9540
; INFORMATION FOR SEQ ID NO: 18:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 30 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; US-08-485-778-18

Query Match 6.7%; Score 30; DB 1; Length 30;
Best Local Similarity 100.0%; Pred. No. 23;
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 77 TGCCTTTGCTCCCGCGCGCTGTTTTCTC 106
Db 30 TGCCTTTGCTCCCGCGCGCTGTTTTCTC 1

RESULT 16
US-08-472-802C-23/c
; Sequence 23, Application US/08472802C
; Patent No. 5958680
; GENERAL INFORMATION:
; APPLICANT: Villeponteau, Bryant
; APPLICANT: Feng, Junli
; APPLICANT: Andrews, William H.
; TITLE OF INVENTION: Mammalian Telomerase
; NUMBER OF SEQUENCES: 44
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/472,802C
; FILING DATE: 07-JUN-1995
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/272,102
; FILING DATE: 07-JUL-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/330,123
; FILING DATE: 27-OCT-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: Smith, William M.
; REGISTRATION NUMBER: 30,223
; REFERENCE/DOCKET NUMBER: 15389-000820
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300

```

```

; INFORMATION FOR SEQ ID NO: 23:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 30 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
; US-08-472-802C-23

Query Match 6.7%; Score 30; DB 1; Length 30;
Best Local Similarity 100.0%; Pred. No. 23;
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 77 TGCCTTTGCTCCCGCGCGCTGTTTTCTC 106
Db 30 TGCCTTTGCTCCCGCGCGCTGTTTTCTC 1

RESULT 17
US-08-520-550A-18/c
; Sequence 18, Application US/08520550A
; Patent No. 6013468
; GENERAL INFORMATION:
; APPLICANT: Andrews, William H.
; APPLICANT: Avillion, Ariel A.
; APPLICANT: Feng, Junli
; APPLICANT: Funk, Walter
; APPLICANT: Greider, Carol
; APPLICANT: Marhuenda, Maria A. B.
; APPLICANT: Villeponteau, Bryant
; TITLE OF INVENTION: RNA Component of Telomerase
; NUMBER OF SEQUENCES: 47
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Hamilton, Brook, Smith & Reynolds, P.C.
; STREET: Two Militia Drive
; CITY: Lexington
; STATE: MA
; COUNTRY: US
; ZIP: 02173
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/520,550A
; FILING DATE: 29-AUG-1995
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/387,524
; FILING DATE: 13-FEB-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/330,123
; FILING DATE: 27-OCT-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/272,102
; FILING DATE: 07-JUL-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: Granahan, Patricia
; REGISTRATION NUMBER: 32,227
; REFERENCE/DOCKET NUMBER: CSHL94-05A3B
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617-861-6240
; TELEFAX: 617-861-9540
; INFORMATION FOR SEQ ID NO: 18:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 30 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; US-08-520-550A-18

Query Match 6.7%; Score 30; DB 1; Length 30;

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; LENGTH: 30
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (1)_terminal
; OTHER INFORMATION: Biotin 5'-terminal
; OTHER INFORMATION: Description of Artificial Sequence: Affinity Agent
US-09-717-829A-4

Query Match          6.7%; Score 30; DB 1; Length 30;
Best Local Similarity 100.0%; Pred. No. 23;
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 167 AAACAAAATGTGAGTGTGCGCCGTC 196
Db 30 AAACAAAATGTGAGTGTGCGCCGTC 1

RESULT 24
US-09-717-829A-5/c
; Sequence 5, Application US/09717829A
; Patent No. 6545133
; GENERAL INFORMATION:
; APPLICANT: Weinrich, Scott L
; APPLICANT: Atkinson III, Edward M
; APPLICANT: Lichtsteiner, Serge P
; APPLICANT: Vasserot, Allain P
; APPLICANT: Pruzan, Ronald A
; TITLE OF INVENTION: A Method for Purifying Telomerase
; FILE REFERENCE: PurifiedTelomeraseO11base
; CURRENT APPLICATION NUMBER: US/09/717,829A
; CURRENT FILING DATE: 2000-11-20
; PRIOR APPLICATION NUMBER: 09/420,056
; PRIOR FILING DATE: 1999-10-18
; PRIOR APPLICATION NUMBER: 08/833,377
; PRIOR FILING DATE: 1997-04-04
; PRIOR APPLICATION NUMBER: 08/510,736
; PRIOR FILING DATE: 1995-08-04
; NUMBER OF SEQ ID NOS: 11
; SOFTWARE: PatentIn Ver. 2.1 edited
; SEQ ID NO 5
; LENGTH: 30
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (1)_terminal
; OTHER INFORMATION: Biotin 5'-terminal
; OTHER INFORMATION: Description of Artificial Sequence: Affinity Agent
US-09-717-829A-5

Query Match          6.7%; Score 30; DB 1; Length 30;
Best Local Similarity 100.0%; Pred. No. 23;
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 137 CCTGCGGCTTCCACCGTTCATTCTAGAGC 166
Db 30 CCTGCGGCTTCCACCGTTCATTCTAGAGC 1

RESULT 25
US-09-057-351-22/c
; Sequence 22, Application US/09057351
; Patent No. 6548298
; GENERAL INFORMATION:
; APPLICANT: Villeponteau, Bryant
; APPLICANT: Feng, Junli
; APPLICANT: Funk, Walter
; APPLICANT: Andrews, William H.
; TITLE OF INVENTION: Mammalian Telomerase
; NUMBER OF SEQUENCES: 42
; CORRESPONDENCE ADDRESS:
```

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; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/057,351
; FILING DATE: 08-APR-1994
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/272,102
; FILING DATE: 07-JUL-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/330,123
; FILING DATE: 27-OCT-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/472,802
; FILING DATE: 07-JUN-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-000821US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 22:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 30 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
; US-09-057-351-22

Query Match          6.7%; Score 30; DB 1; Length 30;
Best Local Similarity 100.0%; Pred. No. 23;
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 77 TGCTTTGCTCCCGCGCTGTTTTC 106
Db 30 TGCTTTGCTCCCGCGCTGTTTTC 1

RESULT 26
US-09-903-461-2/c
; Sequence 2, Application US/09903461
; Patent No. 6602669
; GENERAL INFORMATION:
; APPLICANT: Letsinger, Robert L.
; APPLICANT: Garimella, Viswanadham
; TITLE OF INVENTION: Method of Detection by Enhancement of Silver Staining
; FILE REFERENCE: 00-1086-A
; CURRENT APPLICATION NUMBER: US/09/903,461
; CURRENT FILING DATE: 2001-07-11
; PRIOR APPLICATION NUMBER: 60/217,782
; PRIOR FILING DATE: 2000-07-11
; NUMBER OF SEQ ID NOS: 3
; SOFTWARE: Microsoft Word 98
; SEQ ID NO 2
; LENGTH: 30
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: synthetic oligomer
US-09-903-461-2

Query Match          6.7%; Score 30; DB 1; Length 30;
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Best Local Similarity 100.0%; Pred. No. 23;
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 137 CCTGCCGCTTCCACCGTTTCATTCTAGAGC 166
Db 30 CCTGCCGCTTCCACCGTTTCATTCTAGAGC 1

RESULT 27
US-10-330-872-4/c
; Sequence 4, Application US/10330872
; Patent No. 6787133
; GENERAL INFORMATION:
; APPLICANT: Geron Corporation
; APPLICANT: Weinrich, Scott
; APPLICANT: Atkinson III, Edward
; APPLICANT: Lichtsteiner, Serge
; APPLICANT: Vasserot, Alain
; APPLICANT: Pruzan, Ronald
; TITLE OF INVENTION: Using Purified Telomerase to Identify Telomerase Activators and
; FILE REFERENCE: 011/006C
; CURRENT APPLICATION NUMBER: US/10/330,872
; PRIOR FILING DATE: 2002-12-24
; PRIOR APPLICATION NUMBER: 08/510,736
; PRIOR FILING DATE: 1995-08-04
; PRIOR APPLICATION NUMBER: 08/833,377
; PRIOR FILING DATE: 1997-04-04
; PRIOR APPLICATION NUMBER: 09/420,056
; PRIOR FILING DATE: 1999-10-18
; PRIOR APPLICATION NUMBER: 09/717,828
; PRIOR FILING DATE: 2000-11-20
; NUMBER OF SEQ ID NOS: 11
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 4
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-330-872-4

Query Match 6.7%; Score 30; DB 1; Length 30;
Best Local Similarity 100.0%; Pred. No. 23;
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 167 AACACAAAATGTCAGCTGCTGGCCCGTTC 196
Db 30 AACACAAAATGTCAGCTGCTGGCCCGTTC 1

RESULT 28
US-10-330-872-5/c
; Sequence 5, Application US/10330872
; Patent No. 6787133
; GENERAL INFORMATION:
; APPLICANT: Geron Corporation
; APPLICANT: Weinrich, Scott
; APPLICANT: Atkinson III, Edward
; APPLICANT: Lichtsteiner, Serge
; APPLICANT: Vasserot, Alain
; APPLICANT: Pruzan, Ronald
; TITLE OF INVENTION: Using Purified Telomerase to Identify Telomerase Activators and
; FILE REFERENCE: 011/006C
; CURRENT APPLICATION NUMBER: US/10/330,872
; PRIOR FILING DATE: 2002-12-24
; PRIOR APPLICATION NUMBER: 08/510,736
; PRIOR FILING DATE: 1995-08-04
; PRIOR APPLICATION NUMBER: 08/833,377
; PRIOR FILING DATE: 1997-04-04
; PRIOR APPLICATION NUMBER: 09/420,056
; PRIOR FILING DATE: 1999-10-18
; PRIOR APPLICATION NUMBER: 09/717,828
; PRIOR FILING DATE: 2000-11-20
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; NUMBER OF SEQ ID NOS: 11
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 5
; LENGTH: 30
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-330-872-5

Query Match 6.7%; Score 30; DB 1; Length 30;
Best Local Similarity 100.0%; Pred. No. 23;
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 137 CCTGCCGCTTCCACCGTTTCATTCTAGAGC 166
Db 30 CCTGCCGCTTCCACCGTTTCATTCTAGAGC 1

RESULT 29
US-08-833-377-2/c
; Sequence 2, Application US/08833377
; Patent No. 5968506
; GENERAL INFORMATION:
; APPLICANT: Weinrich, Scott L.
; APPLICANT: Atkinson III, Edward M.
; APPLICANT: Lichtsteiner, Serge P.
; APPLICANT: Vasserot, Alain P.
; APPLICANT: Pruzan, Ronald A.
; APPLICANT: Kealey, James T.
; TITLE OF INVENTION: Purified Telomerase
; NUMBER OF SEQUENCES: 15
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/833,377
; FILING DATE: 04-APR-1997
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/510,736
; FILING DATE: 04-AUG-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-001110US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 30 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
; FEATURE:
; NAME/KEY: modified_base
; LOCATION: 1
; OTHER INFORMATION: /mod_base= OTHER
; OTHER INFORMATION: /note= "N = 5' biotinylated guanosine"
; FEATURE:
; NAME/KEY: -
; LOCATION: 1..30
; OTHER INFORMATION: /note= "oligonucleotide anti-p"
US-08-833-377-2
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Query Match 6.4%; Score 29; DB 1; Length 30;  
Best Local Similarity 100.0%; Pred. No. 28;  
Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 43 TGTCTAACCTTAACCTGAGAGGGGTAGG 71  
DB 30 TGTCTAACCTTAACCTGAGAGGGGTAGG 2

RESULT 30  
US-08-833-377-5/c  
; Sequence 5, Application US/08833377  
; Patent No. 5968506  
; GENERAL INFORMATION:  
; APPLICANT: Weinrich, Scott L.  
; APPLICANT: Atkinson III, Edward M.  
; APPLICANT: Lichtsteiner, Serge P.  
; APPLICANT: Vasserot, Alain P.  
; APPLICANT: Pruzan, Ronald A.  
; APPLICANT: Kealey, James T.  
; TITLE OF INVENTION: Purified Telomerase  
; NUMBER OF SEQUENCES: 15  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Townsend and Townsend and Crew LLP  
; STREET: Two Embarcadero Center, Eighth Floor  
; CITY: San Francisco  
; STATE: California  
; COUNTRY: USA  
; ZIP: 94111-3834  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patent In Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/833,377  
; FILING DATE: 04-APR-1997  
; CLASSIFICATION: 435  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/510,736  
; FILING DATE: 04-AUG-1995  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Storella, John R.  
; REGISTRATION NUMBER: 32,944  
; REFERENCE/DOCKET NUMBER: 015389-001110US  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (415) 576-0200  
; TELEFAX: (415) 576-0300  
; INFORMATION FOR SEQ ID NO: 5:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 30 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: DNA  
; FEATURE:  
; NAME/KEY: modified\_base  
; LOCATION: 1  
; OTHER INFORMATION: /mod\_base= OTHER  
; OTHER INFORMATION: /note= "N = 5' biotinylated guanosine"  
; FEATURE:  
; NAME/KEY: -  
; LOCATION: 1..30  
; OTHER INFORMATION: /note= "Oligo 13"  
US-08-833-377-5

Query Match 6.4%; Score 29; DB 1; Length 30;  
Best Local Similarity 100.0%; Pred. No. 28;  
Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 167 AAACAAAATGTCAGCTGCTGCCCGTT 195  
|||||

Db 30 AAACAAAATGTCAGCTGCTGCCCGTT 2

RESULT 31  
US-08-833-377-6/c  
; Sequence 6, Application US/08833377  
; Patent No. 5968506  
; GENERAL INFORMATION:  
; APPLICANT: Weinrich, Scott L.  
; APPLICANT: Atkinson III, Edward M.  
; APPLICANT: Lichtsteiner, Serge P.  
; APPLICANT: Vasserot, Alain P.  
; APPLICANT: Pruzan, Ronald A.  
; APPLICANT: Kealey, James T.  
; TITLE OF INVENTION: Purified Telomerase  
; NUMBER OF SEQUENCES: 15  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Townsend and Townsend and Crew LLP  
; STREET: Two Embarcadero Center, Eighth Floor  
; CITY: San Francisco  
; STATE: California  
; COUNTRY: USA  
; ZIP: 94111-3834  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patent In Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/833,377  
; FILING DATE: 04-APR-1997  
; CLASSIFICATION: 435  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/510,736  
; FILING DATE: 04-AUG-1995  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Storella, John R.  
; REGISTRATION NUMBER: 32,944  
; REFERENCE/DOCKET NUMBER: 015389-001110US  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (415) 576-0200  
; TELEFAX: (415) 576-0300  
; INFORMATION FOR SEQ ID NO: 6:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 30 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: DNA  
; FEATURE:  
; NAME/KEY: modified\_base  
; LOCATION: 1  
; OTHER INFORMATION: /mod\_base= OTHER  
; OTHER INFORMATION: /note= "N = 5' biotinylated guanosine"  
; FEATURE:  
; NAME/KEY: -  
; LOCATION: 1..30  
; OTHER INFORMATION: /note= "Oligo 14"  
US-08-833-377-6

Query Match 6.4%; Score 29; DB 1; Length 30;  
Best Local Similarity 100.0%; Pred. No. 28;  
Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 137 CCTGCCCGCTTCCACCGTTCATTCTAGAG 165  
DB 30 CCTGCCCGCTTCCACCGTTCATTCTAGAG 2  
|||||

RESULT 32  
US-09-717-828B-3/c  
; Sequence 3, Application US/09717828B  
; Patent No. 6517834

GENERAL INFORMATION:  
; APPLICANT: Weinrich, Scott L  
; APPLICANT: Atkinson III, Edward M  
; APPLICANT: Lichtsteiner, Serge P  
; APPLICANT: Vasserot, Alain P  
; APPLICANT: Pruzan, Ronald A  
; TITLE OF INVENTION: A Method for Purifying Telomerase  
; FILE REFERENCE: PurifiedTelomerase011base  
; CURRENT APPLICATION NUMBER: US/09/717,828B  
; CURRENT FILING DATE: 2000-11-20  
; PRIOR APPLICATION NUMBER: 09/420,056  
; PRIOR FILING DATE: 1999-10-18  
; PRIOR APPLICATION NUMBER: 08/833,377  
; PRIOR FILING DATE: 1997-04-04  
; PRIOR APPLICATION NUMBER: 08/510,736  
; PRIOR FILING DATE: 1995-08-04  
; NUMBER OF SEQ ID NOS: 11  
; SOFTWARE: PatentIn Ver. 2.1 edited  
; SEQ ID NO 3  
; LENGTH: 30  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; NAME/KEY: misc\_feature  
; LOCATION: (1)  
; OTHER INFORMATION: Biotin 5'-terminal  
; OTHER INFORMATION: Description of Artificial Sequence: Affinity Agent  
US-09-717-828B-3

Query Match 6.3%; Score 28.4; DB 1; Length 30;  
Best Local Similarity 96.7%; Pred. No. 31;  
Matches 29; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 412 GAGCTGTGGGACGTGCACCCAGGACTCGGC 441  
Db 30 GAGCTATGGGACGTGCACCCAGGACTCGGC 1

RESULT 33  
US-09-717-829A-3/C  
; Sequence 3, Application US/09717829A  
; Patent No. 6545133  
; GENERAL INFORMATION:  
; APPLICANT: Weinrich, Scott L  
; APPLICANT: Atkinson III, Edward M  
; APPLICANT: Lichtsteiner, Serge P  
; APPLICANT: Vasserot, Alain P  
; APPLICANT: Pruzan, Ronald A  
; TITLE OF INVENTION: A Method for Purifying Telomerase  
; FILE REFERENCE: PurifiedTelomerase011base  
; CURRENT APPLICATION NUMBER: US/09/717,829A  
; CURRENT FILING DATE: 2000-11-20  
; PRIOR APPLICATION NUMBER: 09/420,056  
; PRIOR FILING DATE: 1999-10-18  
; PRIOR APPLICATION NUMBER: 08/833,377  
; PRIOR FILING DATE: 1997-04-04  
; PRIOR APPLICATION NUMBER: 08/510,736  
; PRIOR FILING DATE: 1995-08-04  
; NUMBER OF SEQ ID NOS: 11  
; SOFTWARE: PatentIn Ver. 2.1 edited  
; SEQ ID NO 3  
; LENGTH: 30  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; NAME/KEY: misc\_feature  
; LOCATION: (1)  
; OTHER INFORMATION: Biotin 5'-terminal  
; OTHER INFORMATION: Description of Artificial Sequence: Affinity Agent  
US-09-717-829A-3

Query Match 6.3%; Score 28.4; DB 1; Length 30;  
Best Local Similarity 96.7%; Pred. No. 31;

Matches 29; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
Qy 412 GAGCTGTGGGACGTGCACCCAGGACTCGGC 441  
Db 30 GAGCTATGGGACGTGCACCCAGGACTCGGC 1

RESULT 34  
US-10-330-872-3/C  
; Sequence 3, Application US/10330872  
; Patent No. 6787133  
; GENERAL INFORMATION:  
; APPLICANT: Geron Corporation  
; APPLICANT: Weinrich, Scott  
; APPLICANT: Atkinson III, Edward  
; APPLICANT: Lichtsteiner, Serge  
; APPLICANT: Vasserot, Alain  
; APPLICANT: Pruzan, Ronald  
; TITLE OF INVENTION: Using Purified Telomerase to Identify Telomerase Activators and  
; TITLE OF INVENTION: Inhibitors  
; FILE REFERENCE: 011/006C  
; CURRENT APPLICATION NUMBER: US/10/330,872  
; CURRENT FILING DATE: 2002-12-24  
; PRIOR APPLICATION NUMBER: 08/510,736  
; PRIOR FILING DATE: 1995-08-04  
; PRIOR APPLICATION NUMBER: 08/833,377  
; PRIOR FILING DATE: 1997-04-04  
; PRIOR APPLICATION NUMBER: 09/420,056  
; PRIOR FILING DATE: 1999-10-18  
; PRIOR APPLICATION NUMBER: 09/717,828  
; PRIOR FILING DATE: 2000-11-20  
; NUMBER OF SEQ ID NOS: 11  
; SOFTWARE: PatentIn version 3.1  
; SEQ ID NO 3  
; LENGTH: 30  
; TYPE: DNA  
; ORGANISM: Homo sapiens  
US-10-330-872-3

Query Match 6.3%; Score 28.4; DB 1; Length 30;  
Best Local Similarity 96.7%; Pred. No. 31;  
Matches 29; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 412 GAGCTGTGGGACGTGCACCCAGGACTCGGC 441  
Db 30 GAGCTATGGGACGTGCACCCAGGACTCGGC 1

RESULT 35  
US-09-286-959B-3  
; Sequence 3, Application US/09286959B  
; Patent No. 6300131  
; GENERAL INFORMATION:  
; APPLICANT: Johns Hopkins University  
; APPLICANT: Greider, Carol W.  
; APPLICANT: Le, Siyuan  
; TITLE OF INVENTION: TELOMERASE-ASSOCIATED PROTEINS  
; FILE REFERENCE: 07265/157001  
; CURRENT APPLICATION NUMBER: US/09/286,959B  
; CURRENT FILING DATE: 1999-04-06  
; PRIOR APPLICATION NUMBER: 60/080,783  
; PRIOR FILING DATE: 1998-04-06  
; NUMBER OF SEQ ID NOS: 24  
; SOFTWARE: FastSeq for Windows Version 4.0  
; SEQ ID NO 3  
; LENGTH: 28  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Primer  
US-09-286-959B-3

Query Match 6.2%; Score 28; DB 1; Length 28;

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Best Local Similarity 100.0%; Pred. No. 31;
Matches 28; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 17 GCCTGGGAGGGTGTGTGCCATTTTIG 44
Db 1 GCCTGGGAGGGTGTGTGCCATTTTIG 28

RESULT 36
US-08-833-377-4/c
; Sequence 4, Application US/08833377
; Patent No. 5968506
; GENERAL INFORMATION:
; APPLICANT: Weinrich, Scott L.
; APPLICANT: Atkinson III, Edward M.
; APPLICANT: Lichtsteiner, Serge P.
; APPLICANT: Vasserot, Alain P.
; APPLICANT: Pruzan, Ronald A.
; APPLICANT: Kealey, James T.
; TITLE OF INVENTION: Purified Telomerase
; NUMBER OF SEQUENCES: 15
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent in Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/833.377
; FILING DATE: 04-APR-1997
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/510.736
; FILING DATE: 04-AUG-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-001110US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 4:
; LENGTH: 30 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
; FEATURE:
; NAME/KEY: modified_base
; LOCATION: 1
; OTHER INFORMATION: /mod_base= OTHER
; OTHER INFORMATION: /note= "N = 5' biotinylated guanosine"
; FEATURE:
; NAME/KEY: -
; LOCATION: 1..30
; OTHER INFORMATION: /note= "Oligo 5"
US-08-833-377-4

Query Match 6.1%; Score 27.4; DB 1; Length 30;
Best Local Similarity 96.6%; Pred. No. 37;
Matches 28; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 412 GAGCTGTGGGACGTGCCACCCAGGACTCGG 440
Db 30 GAGCTATGGGACGTGCCACCCAGGACTCGG 2
```

```
RESULT 37
US-08-770-565-26/c
; Sequence 26, Application US/08770565
; Patent No. 5846723
; GENERAL INFORMATION:
; APPLICANT: Kim, Nam Woo
; APPLICANT: Wu, Fred
; APPLICANT: Kealey, James T.
; APPLICANT: Pruzan, Ronald
; APPLICANT: Weinrich, Scott L.
; TITLE OF INVENTION: Methods for Detecting the RNA Component of
; TITLE OF INVENTION: Telomerase
; NUMBER OF SEQUENCES: 26
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: TOWNSEND and TOWNSEND and CREW LLP
; STREET: Two Embarcadero Center, 8th Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent in Release #1.0, Version #1.30
; APPLICATION NUMBER: US/08/770,565
; FILING DATE: 20-DEC-1996
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-002300US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 415-576-0200
; TELEFAX: 415-576-0300
; INFORMATION FOR SEQ ID NO: 26:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 27 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
US-08-770-565-26

Query Match 6.0%; Score 27; DB 1; Length 27;
Best Local Similarity 100.0%; Pred. No. 35;
Matches 27; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 144 CCTTCCACCGTTCATTCTAGAGCAAC 170
Db 27 CCTTCCACCGTTCATTCTAGAGCAAC 1

RESULT 38
US-08-974-180-32/c
; Sequence 32, Application US/08974180
; Patent No. 6025194
; GENERAL INFORMATION:
; APPLICANT: Funk, Walter
; TITLE OF INVENTION: Methods for Modulating and Identifying
; TITLE OF INVENTION: Cellular Senescence
; NUMBER OF SEQUENCES: 36
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Geron Corporation
; STREET: 230 Constitution Drive
; CITY: Menlo Park
; STATE: California
; COUNTRY: USA
; ZIP: 94025
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
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/
/ COMPUTER: IBM PC compatible
/ OPERATING SYSTEM: PC-DOS/MS-DOS
/ SOFTWARE: PatentIn Release #1.0, Version #1.30
/ CURRENT APPLICATION DATA:
/ APPLICATION NUMBER: US/08/974,180
/ FILING DATE: 19-NOV-1997
/ CLASSIFICATION: 435
/ ATTORNEY/AGENT INFORMATION:
/ NAME: Kaster, Kevin R.
/ REGISTRATION NUMBER: 32,704
/ REFERENCE/DOCKET NUMBER: 206
/ TELECOMMUNICATION INFORMATION:
/ TELEPHONE: (650) 473-7779
/ TELEFAX: (650) 473-8654
/ INFORMATION FOR SEQ ID NO: 32:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 27 base pairs
/ TYPE: nucleic acid
/ STRANDEDNESS: single
/ TOPOLOGY: linear
/ MOLECULE TYPE: DNA
/ FEATURE:
/ NAME/KEY: -
/ LOCATION: 1..27
/ OTHER INFORMATION: /note="primer hTR445 comp"
US-08-974-180-32

Query Match 6.0%; Score 27; DB 1; Length 27;
Best Local Similarity 100.0%; Pred. No. 35;
Matches 27; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 425 TGCACCCAGGACTCGGCTCACACATGC 451
Db 27 TGCACCCAGGACTCGGCTCACACATGC 1

RESULT 39
US-08-482-115B-31
/ Sequence 31, Application US/08482115B
/ Patent No. 5776679
/ GENERAL INFORMATION:
/ APPLICANT: Villeponteau, Bryant
/ APPLICANT: Feng, Junli
/ APPLICANT: Funk, Walter
/ APPLICANT: Andrews, William H.
/ TITLE OF INVENTION: Assays for the RNA Component of Human
/ TITLE OF INVENTION: Telomerase
/ NUMBER OF SEQUENCES: 40
/ CORRESPONDENCE ADDRESS:
/ ADDRESSEE: Townsend and Townsend and Crew LLP
/ STREET: Two Embarcadero Center, Eighth Floor
/ CITY: San Francisco
/ STATE: California
/ COUNTRY: USA
/ ZIP: 94111-3834
/ COMPUTER READABLE FORM:
/ MEDIUM TYPE: Floppy disk
/ OPERATING SYSTEM: PC-DOS/MS-DOS
/ SOFTWARE: PatentIn Release #1.0, Version #1.30
/ CURRENT APPLICATION DATA:
/ APPLICATION NUMBER: US/08/482,115B
/ FILING DATE: 07-JUN-1995
/ CLASSIFICATION: 435
/ PRIOR APPLICATION NUMBER:
/ APPLICATION NUMBER: US 08/272,102
/ FILING DATE: 07-JUL-1994
/ PRIOR APPLICATION DATA:
/ APPLICATION NUMBER: US 08/330,123
/ FILING DATE: 27-OCT-1994
/ ATTORNEY/AGENT INFORMATION:
/ NAME: Storella, John R.
/ REGISTRATION NUMBER: 32,944
/ REFERENCE/DOCKET NUMBER: 015389-000830US
/ TELECOMMUNICATION INFORMATION:
/ TELEPHONE: (415) 576-0200
/ TELEFAX: (415) 576-0300
/ INFORMATION FOR SEQ ID NO: 40:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 28 base pairs
/ TYPE: nucleic acid
/ STRANDEDNESS: single
/ TOPOLOGY: linear
/ MOLECULE TYPE: RNA
US-08-482-115B-40
```

```
/
/ REFERENCE/DOCKET NUMBER: 015389-000830US
/ TELECOMMUNICATION INFORMATION:
/ TELEPHONE: (415) 576-0200
/ TELEFAX: (415) 576-0300
/ INFORMATION FOR SEQ ID NO: 31:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 28 base pairs
/ TYPE: nucleic acid
/ STRANDEDNESS: single
/ TOPOLOGY: linear
/ MOLECULE TYPE: DNA
US-08-482-115B-31

Query Match 5.9%; Score 26.4; DB 1; Length 28;
Best Local Similarity 96.4%; Pred. No. 41;
Matches 27; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 17 GCCTGGGAGGGTGGTGGCCATTTTGG 44
Db 1 GCCTGGGAGGGTGGTGGCTATTTTGG 28

RESULT 40
US-08-482-115B-40
/ Sequence 40, Application US/08482115B
/ Patent No. 5776679
/ GENERAL INFORMATION:
/ APPLICANT: Villeponteau, Bryant
/ APPLICANT: Feng, Junli
/ APPLICANT: Funk, Walter
/ APPLICANT: Andrews, William H.
/ TITLE OF INVENTION: Assays for the RNA Component of Human
/ TITLE OF INVENTION: Telomerase
/ NUMBER OF SEQUENCES: 40
/ CORRESPONDENCE ADDRESS:
/ ADDRESSEE: Townsend and Townsend and Crew LLP
/ STREET: Two Embarcadero Center, Eighth Floor
/ CITY: San Francisco
/ STATE: California
/ COUNTRY: USA
/ ZIP: 94111-3834
/ COMPUTER READABLE FORM:
/ MEDIUM TYPE: Floppy disk
/ OPERATING SYSTEM: PC-DOS/MS-DOS
/ SOFTWARE: PatentIn Release #1.0, Version #1.30
/ CURRENT APPLICATION DATA:
/ APPLICATION NUMBER: US/08/482,115B
/ FILING DATE: 07-JUN-1995
/ CLASSIFICATION: 435
/ PRIOR APPLICATION NUMBER:
/ APPLICATION NUMBER: US 08/272,102
/ FILING DATE: 07-JUL-1994
/ PRIOR APPLICATION DATA:
/ APPLICATION NUMBER: US 08/330,123
/ FILING DATE: 27-OCT-1994
/ ATTORNEY/AGENT INFORMATION:
/ NAME: Storella, John R.
/ REGISTRATION NUMBER: 32,944
/ REFERENCE/DOCKET NUMBER: 015389-000830US
/ TELECOMMUNICATION INFORMATION:
/ TELEPHONE: (415) 576-0200
/ TELEFAX: (415) 576-0300
/ INFORMATION FOR SEQ ID NO: 40:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 28 base pairs
/ TYPE: nucleic acid
/ STRANDEDNESS: single
/ TOPOLOGY: linear
/ MOLECULE TYPE: RNA
US-08-482-115B-40

Query Match 5.9%; Score 26.4; DB 1; Length 28;
```



```
Best Local Similarity 64.3%; Pred. No. 41;
Matches 18; Conservative 9; Mismatches 1; Indels 0; Gaps 0;

Qy 17 GCCTGGAGGGGTGGTGGCCATTTTGG 44
|||:|||||:|||||:|||||:|||||:
Db 1 GCCUGGAGGGGUGGUGGCUUUUUUG 28

RESULT 41
US-08-472-802C-38
; Sequence 38, Application US/08472802C
; Patent No. 5958680
; GENERAL INFORMATION:
; APPLICANT: Villeponteau, Bryant
; APPLICANT: Feng, Junli
; APPLICANT: Andrews, William H.
; TITLE OF INVENTION: Mammalian telomerase
; NUMBER OF SEQUENCES: 44
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/472.802C
; FILING DATE: 07-JUN-1995
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/272,102
; FILING DATE: 07-JUL-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/330,123
; FILING DATE: 27-OCT-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: Smith, William M.
; REGISTRATION NUMBER: 30,223
; REFERENCE/DOCKET NUMBER: 15389-000820
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0300
; TELEFAX: (415) 576-0200
; INFORMATION FOR SEQ ID NO: 38:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 28 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
US-08-472-802C-38

Query Match 5.9%; Score 26.4; DB 1; Length 28;
Best Local Similarity 96.4%; Pred. No. 41;
Matches 27; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 17 GCCTGGAGGGGTGGTGGCCATTTTGG 44
|||:|||||:|||||:|||||:|||||:
Db 1 GCCUGGAGGGGUGGUGGCUUUUUUG 28

RESULT 42
US-08-330-123A-23/c
; Sequence 23, Application US/08330123A
; Patent No. 5583016
; GENERAL INFORMATION:
; APPLICANT: VILLEPONTEAU, Bryant
; APPLICANT: FENG, Junli
; APPLICANT: FUNK, Walter
```

```
; APPLICANT: ANDREWS, William H.
; TITLE OF INVENTION: HUMAN TELOMERASE
; NUMBER OF SEQUENCES: 25
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend Khourie and Crew
; STREET: 379 Lytton Avenue
; CITY: Palo Alto
; STATE: California
; COUNTRY: US
; ZIP: 94301
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/330,123A
; FILING DATE: 27-OCT-1994
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/272,102
; FILING DATE: 07-JUL-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: Smith, William M.
; REGISTRATION NUMBER: 30,223
; REFERENCE/DOCKET NUMBER: 15389-000810
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 326-2400
; TELEFAX: (415) 326-2422
; INFORMATION FOR SEQ ID NO: 23:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 26 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
US-08-330-123A-23

Query Match 5.8%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 40;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 145 CTTCCACCGTTCATTCTAGAGCAAC 170
|||||:|||||:|||||:|||||:|||||:
Db 26 CTTCCACCGTTCATTCTAGAGCAAC 1

RESULT 43
US-08-482-115B-23/c
; Sequence 23, Application US/08482115B
; Patent No. 5776679
; GENERAL INFORMATION:
; APPLICANT: Villeponteau, Bryant
; APPLICANT: Feng, Junli
; APPLICANT: Funk, Walter
; APPLICANT: Andrews, William H.
; TITLE OF INVENTION: Assays for the RNA Component of Human
; NUMBER OF SEQUENCES: 40
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/482,115B
```

```
; FILING DATE: 07-JUN-1995
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/272,102
; FILING DATE: 07-JUL-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/330,123
; FILING DATE: 27-OCT-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-000830US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; INFORMATION FOR SEQ ID NO: 23:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 26 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
US-08-482-115B-23

Query Match 5.8%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 40;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 145 CTTCCACCGTTCATTCTAGAGCAAC 170
Db 26 CTTCCACCGTTCATTCTAGAGCAAC 1

RESULT 44
US-08-482-115B-29
; Sequence 29, Application US/08482115B
; Patent No. 5776679
; GENERAL INFORMATION:
; APPLICANT: Villeponteau, Bryant
; APPLICANT: Feng, Junli
; APPLICANT: Funk, Walter
; APPLICANT: Andrews, William H.
; TITLE OF INVENTION: Assays for the RNA Component of Human
; TITLE OF INVENTION: Telomerase
; NUMBER OF SEQUENCES: 40
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/482,115B
; FILING DATE: 07-JUN-1995
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/272,102
; FILING DATE: 07-JUL-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/330,123
; FILING DATE: 27-OCT-1994
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-000830US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
```

```
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 29:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 26 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
US-08-482-115B-29

Query Match 5.8%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 40;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 45 TCTAACCTTAAGGAGGGCGGTAG 70
Db 1 TCTAACCTTAAGGAGGGCGGTAG 26

RESULT 45
US-08-660-678A-23/c
; Sequence 23, Application US/08660678A
; Patent No. 5837857
; GENERAL INFORMATION:
; APPLICANT: Villeponteau, Bryant
; APPLICANT: Feng, Junli
; APPLICANT: Funk, Walter
; APPLICANT: Andrews, William H.
; TITLE OF INVENTION: Mammalian Telomerase
; NUMBER OF SEQUENCES: 30
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/660,678A
; FILING DATE: 05-JUN-1996
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/330,123
; FILING DATE: 27-OCT-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/272,102
; FILING DATE: 07-JUL-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-000811US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 23:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 26 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
US-08-660-678A-23

Query Match 5.8%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 40;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 145 CTTCCACCGTTCATTCTAGAGCAAC 170
```



APPLICATION NUMBER: US 08/583,808  
FILING DATE: 05-JAN-1996  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 60/003,492  
FILING DATE: 08-SEP-1995  
ATTORNEY/AGENT INFORMATION:  
NAME: Storella, John R.  
REGISTRATION NUMBER: 32,944  
REFERENCE/DOCKET NUMBER: 015389-001220US  
TELEPHONE: (415) 576-0200  
TELEFAX: (415) 576-0300  
INFORMATION FOR SEQ ID NO: 26:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 26 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: DNA  
US-08-710-249-26

Query Match 5.8%; Score 26; DB 1; Length 26;  
Best Local Similarity 100.0%; Pred. No. 40;  
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 145 CTTCCACCGTTCATTCTAGAGCAAC 170  
Db 26 CTTCCACCGTTCATTCTAGAGCAAC 1

RESULT 49  
US-08-485-778-19/c  
Sequence 19, Application US/08485778  
Patent No. 5876979  
GENERAL INFORMATION:  
APPLICANT: Andrews, William H.  
APPLICANT: Avilion, Ariel Athena  
APPLICANT: Feng, Junli  
APPLICANT: Funk, Walter  
APPLICANT: Greider, Carol  
APPLICANT: Marhuenda, Maria Antonia Blasco  
APPLICANT: Villeponteau, Bryant  
TITLE OF INVENTION: RNA COMPONENT OF TELOMERASE  
NUMBER OF SEQUENCES: 45  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Hamilton, Brook, Smith & Reynolds, P.C.  
STREET: Two Militia Drive  
CITY: Lexington  
STATE: MA  
COUNTRY: US  
ZIP: 02173  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patent In Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/485,778  
FILING DATE: 07-JE-1995  
CLASSIFICATION: 435  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/387,524  
FILING DATE: 13-FEB-1995  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/330,123  
FILING DATE: 27-OCT-1994  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/272,102  
FILING DATE: 07-JUL-1994  
ATTORNEY/AGENT INFORMATION:  
NAME: Granahan, Patricia  
REGISTRATION NUMBER: 32,227  
REFERENCE/DOCKET NUMBER: CSHL94-05A4

TELECOMMUNICATION INFORMATION:  
TELEPHONE: 617-861-6240  
TELEFAX: 617-861-9540  
INFORMATION FOR SEQ ID NO: 19:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 26 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
US-08-485-778-19

Query Match 5.8%; Score 26; DB 1; Length 26;  
Best Local Similarity 100.0%; Pred. No. 40;  
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 145 CTTCCACCGTTCATTCTAGAGCAAC 170  
Db 26 CTTCCACCGTTCATTCTAGAGCAAC 1

RESULT 50  
US-08-472-802C-24/c  
Sequence 24, Application US/08472802C  
Patent No. 5958680  
GENERAL INFORMATION:  
APPLICANT: Villeponteau, Bryant  
APPLICANT: Feng, Junli  
APPLICANT: Andrews, William H.  
TITLE OF INVENTION: Mammalian Telomerase  
NUMBER OF SEQUENCES: 44  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Townsend and Townsend and Crew LLP  
STREET: Two Embarcadero Center, Eighth Floor  
CITY: San Francisco  
STATE: California  
COUNTRY: USA  
ZIP: 94111-3834  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patent In Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/472,802C  
FILING DATE: 07-JUN-1995  
CLASSIFICATION: 514  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/272,102  
FILING DATE: 07-JUL-1994  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/330,123  
FILING DATE: 27-OCT-1994  
ATTORNEY/AGENT INFORMATION:  
NAME: Smith, William M.  
REGISTRATION NUMBER: 30,223  
REFERENCE/DOCKET NUMBER: 15389-000820  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (415) 576-0200  
TELEFAX: (415) 576-0300  
INFORMATION FOR SEQ ID NO: 24:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 26 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: DNA  
US-08-472-802C-24

Query Match 5.8%; Score 26; DB 1; Length 26;  
Best Local Similarity 100.0%; Pred. No. 40;  
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 145 CTTCCACCGTTCATTCTAGAGCAAC 170

```

; TITLE OF INVENTION: RNA Component of Telomerase
; NUMBER OF SEQUENCES: 47
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Hamilton, Brook, Smith & Reynolds, P.C.
; STREET: Two Militia Drive
; CITY: Lexington
; STATE: MA
; COUNTRY: US
; ZIP: 02173
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/520,550A
; FILING DATE: 29-AUG-1995
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/387,524
; FILING DATE: 13-FEB-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/330,123
; FILING DATE: 27-OCT-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/272,102
; FILING DATE: 07-JUL-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: Granahan, Patricia
; REGISTRATION NUMBER: 32,227
; REFERENCE/DOCKET NUMBER: CSH194-05A3B
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617-861-6240
; TELEFAX: 617-861-9540
; INFORMATION FOR SEQ ID NO: 19:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 26 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
;
US-08-520-550A-19

Query Match 5.8%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred.No. 40;
Matches 26; Conservative 0; Mismatches 0; Indels

QY 145 CTTCCACCGTTCATTCTAGAGCAAC 170
Db 26 CTTCCACCGTTCATTCTAGAGCAAC 1
|||||
|||||

RESULT 53
US-08-974-180-33
; Sequence 33, Application US/08974180
; Patent No. 6025194
; GENERAL INFORMATION:
; APPLICANT: Funk, Walter
; TITLE OF INVENTION: Methods for Modulating and Identifying
; TITLE OF INVENTION: Cellular Senescence
; NUMBER OF SEQUENCES: 36
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Geron Corporation
; STREET: 230 Constitution Drive
; CITY: Menlo Park
; STATE: California
; COUNTRY: USA
; ZIP: 94025
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:

```

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; APPLICATION NUMBER: US/08/974,180
; FILING DATE: 19-NOV-1997
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Kaster, Kevin R.
; REGISTRATION NUMBER: 32,704
; REFERENCE/DOCKET NUMBER: 206
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (650) 473-7779
; TELEFAX: (650) 473-8654
; INFORMATION FOR SEQ ID NO: 33:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 26 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
; FEATURE:
; NAME/KEY: -
; LOCATION: 1..26
; OTHER INFORMATION: /note= "primer hTR S328"
US-08-974-180-33

Query Match 5.8%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 40;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 306 TTGGGCTCTGTGACGGCGGGTCTCT 331
Db 1 TTGGGCTCTGTGACGGCGGGTCTCT 26

RESULT 54
US-08-998-443-23/c
; Sequence 23, Application US/08998443
; Patent No. 6054575
; GENERAL INFORMATION:
; APPLICANT: Villeponteau, Bryant
; APPLICANT: Feng, Junli
; APPLICANT: Funk, Walter
; APPLICANT: Andrews, William H.
; TITLE OF INVENTION: Mammalian Telomerase
; NUMBER OF SEQUENCES: 30
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION NUMBER: US/08/998,443
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/08/660,678
; FILING DATE: 05-JUN-1996
; APPLICATION NUMBER: US 08/330,123
; FILING DATE: 27-OCT-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/272,102
; FILING DATE: 07-JUL-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-000811US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
```

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; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 23:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 26 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
US-08-998-443-23

Query Match 5.8%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 40;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 145 CTTCCACCGTTTCATTCTAGAGCAAC 170
Db 26 CTTCCACCGTTTCATTCTAGAGCAAC 1

RESULT 55
US-08-974-549A-597
; Sequence 597, Application US/08974549A
; Patent No. 6166178
; GENERAL INFORMATION:
; APPLICANT: Cech, Thomas R.
; APPLICANT: Lingner, Joachim
; APPLICANT: Nakamura, Toru
; APPLICANT: Chapman, Karen B.
; APPLICANT: Morin, Gregg B.
; APPLICANT: Harley, Calvin B.
; APPLICANT: Andrews, William H.
; TITLE OF INVENTION: Human Telomerase Catalytic Subunit
; NUMBER OF SEQUENCES: 727
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION NUMBER: US/08/974,549A
; FILING DATE: 19-NOV-1997
; CLASSIFICATION: 536
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/724,643
; FILING DATE: 01-OCT-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/844,419
; FILING DATE: 18-APR-1997
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/846,017
; FILING DATE: 25-APR-1997
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/851,843
; FILING DATE: 06-MAY-1997
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/854,050
; FILING DATE: 09-MAY-1997
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/911,312
; FILING DATE: 14-AUG-1997
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/912,951
; FILING DATE: 14-AUG-1997
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/915,503
; FILING DATE: 14-AUG-1997
```

;; PRIOR APPLICATION DATA: WO PCT/US97/17618  
;; APPLICATION NUMBER: WO PCT/US97/17618  
;; FILING DATE: 01-OCT-1997  
;; PRIOR APPLICATION DATA: WO PCT/US97/17885  
;; APPLICATION NUMBER: WO PCT/US97/17885  
;; FILING DATE: 01-OCT-1997  
;; ATTORNEY/AGENT INFORMATION:  
;; NAME: Apple, Randolph Ted  
;; REGISTRATION NUMBER: 36,429  
;; REFERENCE/DOCKET NUMBER: 015389-002610US  
;; TELECOMMUNICATION INFORMATION:  
;; TELEPHONE: (415) 576-0200  
;; TELEFAX: (415) 576-0300  
;; INFORMATION FOR SEQ ID NO: 597:  
;; SEQUENCE CHARACTERISTICS:  
;; LENGTH: 26 base pairs  
;; TYPE: nucleic acid  
;; STRANDEDNESS: single  
;; TOPOLOGY: linear  
;; MOLECULE TYPE: DNA  
;; FEATURE:  
;; NAME/KEY: -  
;; LOCATION: 1..26  
;; OTHER INFORMATION: /note= "F3b primer"  
US-08-974-549A-597

Query Match 5.8%; Score 26; DB 1; Length 26;  
Best Local Similarity 100.0%; Pred. No. 40;  
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 45 TCTAACCTTAAGGAGGCGTAG 70  
Db 1 TCTAACCTTAAGGAGGCGTAG 26

## RESULT 56

US-08-974-549A-598/c  
; Sequence 598, Application US/08974549A  
; Patent No. 6166178  
; GENERAL INFORMATION:  
; APPLICANT: Cech, Thomas R.  
; APPLICANT: Lingner, Joachim  
; APPLICANT: Nakamura, Toru  
; APPLICANT: Chapman, Karen B.  
; APPLICANT: Morin, Gregg B.  
; APPLICANT: Harley, Calvin B.  
; APPLICANT: Andrews, William H.  
; TITLE OF INVENTION: Human Telomerase Catalytic Subunit  
; NUMBER OF SEQUENCES: 727  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Townsend and Townsend and Crew LLP  
; STREET: Two Embarcadero Center, Eighth Floor  
; CITY: San Francisco  
; STATE: California  
; COUNTRY: USA  
; ZIP: 94111-3834  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patentin Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/974,549A  
; FILING DATE: 19-NOV-1997  
; CLASSIFICATION: 536  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/724,643  
; FILING DATE: 01-OCT-1996  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/844,419  
; FILING DATE: 18-APR-1997  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/846,017

;; FILING DATE: 25-APR-1997  
;; PRIOR APPLICATION DATA: US 08/851,843  
;; APPLICATION NUMBER: US 08/851,843  
;; FILING DATE: 06-MAY-1997  
;; PRIOR APPLICATION DATA: US 08/854,050  
;; APPLICATION NUMBER: US 08/854,050  
;; FILING DATE: 09-MAY-1997  
;; PRIOR APPLICATION DATA: US 08/911,312  
;; APPLICATION NUMBER: US 08/911,312  
;; FILING DATE: 14-AUG-1997  
;; PRIOR APPLICATION DATA: US 08/912,951  
;; APPLICATION NUMBER: US 08/912,951  
;; FILING DATE: 14-AUG-1997  
;; PRIOR APPLICATION DATA: US 08/915,503  
;; APPLICATION NUMBER: US 08/915,503  
;; FILING DATE: 14-AUG-1997  
;; PRIOR APPLICATION DATA: WO PCT/US97/17618  
;; APPLICATION NUMBER: WO PCT/US97/17618  
;; FILING DATE: 01-OCT-1997  
;; PRIOR APPLICATION DATA: WO PCT/US97/17885  
;; APPLICATION NUMBER: WO PCT/US97/17885  
;; FILING DATE: 01-OCT-1997  
;; ATTORNEY/AGENT INFORMATION:  
;; NAME: Apple, Randolph Ted  
;; REGISTRATION NUMBER: 36,429  
;; REFERENCE/DOCKET NUMBER: 015389-002610US  
;; TELECOMMUNICATION INFORMATION:  
;; TELEPHONE: (415) 576-0200  
;; TELEFAX: (415) 576-0300  
;; INFORMATION FOR SEQ ID NO: 598:  
;; SEQUENCE CHARACTERISTICS:  
;; LENGTH: 26 base pairs  
;; TYPE: nucleic acid  
;; STRANDEDNESS: single  
;; TOPOLOGY: linear  
;; MOLECULE TYPE: DNA  
;; FEATURE:  
;; NAME/KEY: -  
;; LOCATION: 1..26  
;; OTHER INFORMATION: /note= "R3c primer"  
US-08-974-549A-598

Query Match 5.8%; Score 26; DB 1; Length 26;  
Best Local Similarity 100.0%; Pred. No. 40;  
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 145 CTTCCACCGTTTCATTCTAGAGCAAC 170  
Db 26 CTTCCACCGTTTCATTCTAGAGCAAC 1

## RESULT 57

US-09-060-523-23/c  
; Sequence 23, Application US/09060523  
; Patent No. 6258535  
; GENERAL INFORMATION:  
; APPLICANT: Villeponteau, Bryant  
; APPLICANT: Feng, Junli  
; APPLICANT: Funk, Walter  
; APPLICANT: Andrews, William H.  
; TITLE OF INVENTION: Mammalian Telomerase  
; NUMBER OF SEQUENCES: 25  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Townsend and Townsend and Crew LLP  
; STREET: Two Embarcadero Center, Eighth Floor  
; CITY: San Francisco  
; STATE: California  
; COUNTRY: USA  
; ZIP: 94111-3834  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: PatentIn Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/09/060,523  
FILING DATE: 14-APR-1998  
CLASSIFICATION: 536  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/660,678  
FILING DATE: 05-JUN-1996  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/330,123  
FILING DATE: 27-OCT-1994  
APPLICATION DATA:  
APPLICATION NUMBER: US 08/272,102  
FILING DATE: 07-JUL-1994  
ATTORNEY/AGENT INFORMATION:  
NAME: Storella, John R.  
REGISTRATION NUMBER: 32,944  
REFERENCE/DOCKET NUMBER: 015389-000813US  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (415) 576-0200  
TELEFAX: (415) 576-0300  
INFORMATION FOR SEQ ID NO: 23:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 26 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: DNA  
US-09-060-523-23

Query Match 5.8%; Score 26; DB 1; Length 26;  
Best Local Similarity 100.0%; Pred. No. 40;  
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 145 CTTCACCGTTCATCTAGAGCAAC 170  
Db 26 CTTCACCGTTCATCTAGAGCAAC 1

RESULT 58  
US-09-220-157A-25  
Sequence 25, Application US/09220157A  
Patent No. 6300110  
GENERAL INFORMATION:  
APPLICANT: Villeponteau, Bryant  
APPLICANT: Feng, Junli  
APPLICANT: Andrews, William H.  
TITLE OF INVENTION: Methods and Reagents for Regulating  
OPERATING SYSTEM: PC-DOS/MS-DOS  
NUMBER OF SEQUENCES: 26  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Townsend and Townsend and Crew LLP  
STREET: Two Embarcadero Center, Eighth Floor  
CITY: San Francisco  
STATE: California  
COUNTRY: USA  
ZIP: 94111-3834  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/09/220,157A  
FILING DATE:  
CLASSIFICATION:  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US/08/710,249  
FILING DATE: 13-SEP-1996  
APPLICATION NUMBER: US 08/583,808  
FILING DATE: 05-JAN-1996  
PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 60/003,492  
FILING DATE: 08-SEP-1995  
ATTORNEY/AGENT INFORMATION:  
NAME: Storella, John R.  
REGISTRATION NUMBER: 32,944  
REFERENCE/DOCKET NUMBER: 015389-001220US  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (415) 576-0200  
TELEFAX: (415) 576-0300  
INFORMATION FOR SEQ ID NO: 25:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 26 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: DNA  
US-09-220-157A-25  
Query Match 5.8%; Score 26; DB 1; Length 26;  
Best Local Similarity 100.0%; Pred. No. 40;  
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Qy 45 TCTAACCCCTAACTGAGAGGGCGTAG 70  
Db 1 TCTAACCCCTAACTGAGAGGGCGTAG 26  
RESULT 59  
US-09-220-157A-26/c  
Sequence 26, Application US/09220157A  
Patent No. 6300110  
GENERAL INFORMATION:  
APPLICANT: Villeponteau, Bryant  
APPLICANT: Feng, Junli  
APPLICANT: Andrews, William H.  
TITLE OF INVENTION: Methods and Reagents for Regulating  
OPERATING SYSTEM: PC-DOS/MS-DOS  
NUMBER OF SEQUENCES: 26  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Townsend and Townsend and Crew LLP  
STREET: Two Embarcadero Center, Eighth Floor  
CITY: San Francisco  
STATE: California  
COUNTRY: USA  
ZIP: 94111-3834  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/09/220,157A  
FILING DATE:  
CLASSIFICATION:  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US/08/710,249  
FILING DATE: 13-SEP-1996  
APPLICATION NUMBER: US 08/583,808  
FILING DATE: 05-JAN-1996  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 60/003,492  
FILING DATE: 08-SEP-1995  
ATTORNEY/AGENT INFORMATION:  
NAME: Storella, John R.  
REGISTRATION NUMBER: 32,944  
REFERENCE/DOCKET NUMBER: 015389-001220US  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (415) 576-0200  
TELEFAX: (415) 576-0300  
INFORMATION FOR SEQ ID NO: 26:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 26 base pairs



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; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
US-09-220-157A-26

Query Match          5.8%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 40;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 145 CTTCCACCGTTTCATTCTAGAGCAAAAC 170
Db 26 CTTCCACCGTTTCATTCTAGAGCAAAAC 1

RESULT 60
US-09-286-959B-4/c
; Sequence 4, Application US/09286959B
; Patent No. 6300131
; GENERAL INFORMATION:
; APPLICANT: Johns Hopkins University
; APPLICANT: Greider, Carol W.
; APPLICANT: Le, Siyuan
; TITLE OF INVENTION: TELOMERASE-ASSOCIATED PROTEINS
; FILE REFERENCE: 07265/157001
; CURRENT APPLICATION NUMBER: US/09/286.959B
; CURRENT FILING DATE: 1999-04-06
; PRIOR APPLICATION NUMBER: 60/080,783
; PRIOR FILING DATE: 1998-04-06
; NUMBER OF SEQ ID NOS: 24
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 4
; LENGTH: 26
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Primer
US-09-286-959B-4

Query Match          5.8%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 40;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 145 CTTCCACCGTTTCATTCTAGAGCAAAAC 170
Db 26 CTTCCACCGTTTCATTCTAGAGCAAAAC 1

RESULT 61
US-09-580-517-23/c
; Sequence 23, Application US/09580517
; Patent No. 6320039
; GENERAL INFORMATION:
; APPLICANT: VILLEPONTEAU, Bryant
; APPLICANT: FENG, Junli
; APPLICANT: FUNK, Walter
; APPLICANT: ANDREWS, William H.
; TITLE OF INVENTION: HUMAN TELOMERASE
; NUMBER OF SEQUENCES: 25
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend Khourie and Crew
; STREET: 379 Lytton Avenue
; CITY: Palo Alto
; STATE: California
; COUNTRY: US
; ZIP: 94301
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/580.517
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; FILING DATE: 25-May-2000
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/330,123
; FILING DATE: <Unknown>
; ATTORNEY/AGENT INFORMATION:
; NAME: Smith, William M
; REGISTRATION NUMBER: 30,223
; REFERENCE/DOCKET NUMBER: 15389-000810
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 326-2400
; TELEFAX: (415) 326-2422
; INFORMATION FOR SEQ ID NO: 23:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 26 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
; SEQUENCE DESCRIPTION: SEQ ID NO: 23:
US-09-580-517-23

Query Match          5.8%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 40;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 145 CTTCCACCGTTTCATTCTAGAGCAAAAC 170
Db 26 CTTCCACCGTTTCATTCTAGAGCAAAAC 1

RESULT 62
US-08-912-951-311
; Sequence 311, Application US/08912951
; Patent No. 6475789
; GENERAL INFORMATION:
; APPLICANT: Cech, Thomas R.
; APPLICANT: Lingner, Joachim
; APPLICANT: Nakamura, Toru
; APPLICANT: Chapman, Karen B.
; APPLICANT: Morin, Gregg B.
; APPLICANT: Harley, Calvin
; APPLICANT: Andrews, William H.
; TITLE OF INVENTION: HUMAN TELOMERASE CATALYTIC SUBUNIT:
; TITLE OF INVENTION: THERAPEUTIC METHODS
; NUMBER OF SEQUENCES: 335
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, 8th Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: United States of America
; ZIP: 94111
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/912,951
; FILING DATE: 14-AUG-1997
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/854,050
; FILING DATE: 09-MAY-1997
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/851,843
; FILING DATE: 06-MAY-1997
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/846,017
; FILING DATE: 25-APR-1997
```

```
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/844,419
; FILING DATE: 18-APR-1997
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/724,643
; FILING DATE: 01-OCT-1996
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Apple, Randolph T.
; REGISTRATION NUMBER: 36,429
; REFERENCE/DOCKET NUMBER: 015389-0026000US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 311:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 26 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
; US-08-912-951-311

Query Match          5.8%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 40;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 45 TCTAACCTTAACCTGAGAGGGCGTAG 70
Db 1 TCTAACCTTAACCTGAGAGGGCGTAG 26

RESULT 63
US-08-912-951-312/c
; Sequence 312, Application US/08912951
; Patent No. 6475789
; GENERAL INFORMATION:
; APPLICANT: Cech, Thomas R.
; APPLICANT: Lingner, Joachim
; APPLICANT: Nakamura, Toru
; APPLICANT: Chapman, Karen B.
; APPLICANT: Morin, Gregg B.
; APPLICANT: Harley, Calvin
; APPLICANT: Andrews, William H.
; TITLE OF INVENTION: HUMAN TELOMERASE CATALYTIC SUBUNIT: DIAGNOSTIC AND
; THERAPEUTIC METHODS
; NUMBER OF SEQUENCES: 335
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, 8th Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: United States of America
; ZIP: 94111
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/912,951
; FILING DATE: 14-AUG-1997
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/854,050
; FILING DATE: 09-MAY-1997
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/851,843
; FILING DATE: 06-MAY-1997
; CLASSIFICATION: 435
```

```
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/846,017
; FILING DATE: 25-APR-1997
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/844,419
; FILING DATE: 18-APR-1997
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/724,643
; FILING DATE: 01-OCT-1996
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Apple, Randolph T.
; REGISTRATION NUMBER: 36,429
; REFERENCE/DOCKET NUMBER: 015389-0026000US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 312:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 26 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
; US-08-912-951-312

Query Match          5.8%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 40;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 145 CTTCCACCGTTCATTCTTAGAGCAAC 170
Db 26 CTTCCACCGTTCATTCTTAGAGCAAC 1

RESULT 64
US-09-057-351-23/c
; Sequence 23, Application US/09057351
; Patent No. 6548298
; GENERAL INFORMATION:
; APPLICANT: Villeponteau, Bryant
; APPLICANT: Feng, Junli
; APPLICANT: Funk, Walter
; APPLICANT: Andrews, William H.
; TITLE OF INVENTION: Mammalian Telomerase
; NUMBER OF SEQUENCES: 42
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/057,351
; FILING DATE: 08-APR-1994
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/272,102
; FILING DATE: 07-JUL-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/330,123
; FILING DATE: 27-OCT-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/472,802
; FILING DATE: 07-JUN-1995
```

```
; ATTORNEY/AGENT INFORMATION:
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-000821US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0300
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 23:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 26 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
US-09-057-351-23

Query Match          5.8%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 40;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 145 CTTCCACCGTTCAATCTAGAGCAAAAC 170
Db 26 CTTCCACCGTTCAATCTAGAGCAAAAC 1

RESULT 65
US-09-057-351-30
; Sequence 30, Application US/09057351
; Patent No. 6548298
; GENERAL INFORMATION:
; APPLICANT: Villeponteau, Bryant
; APPLICANT: Feng, Junli
; APPLICANT: Funk, Walter
; APPLICANT: Andrews, William H.
; TITLE OF INVENTION: Mammalian Telomerase
; NUMBER OF SEQUENCES: 42
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/057,351
; FILING DATE: 08-APR-1994
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/272,102
; FILING DATE: 07-JUL-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/330,123
; FILING DATE: 27-OCT-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/472,802
; FILING DATE: 07-JUN-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-000821US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0300
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 30:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 26 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
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; TOPOLOGY: linear
; MOLECULE TYPE: DNA
US-09-057-351-30

Query Match          5.8%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 40;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 45 TCTAACCCCTAACTGAGAAGGCGGTAG 70
Db 1 TCTAACCCCTAACTGAGAAGGCGGTAG 26

RESULT 66
US-09-653-573--4
; Sequence 4, Application US/09653573
; Patent No. 6607898
; GENERAL INFORMATION:
; APPLICANT: Kopreski, Michael S.
; APPLICANT: Gocke, Christopher D.
; TITLE OF INVENTION: Method for Detection of hTR and hTERT
; FILE REFERENCE: 00-1328
; CURRENT APPLICATION NUMBER: US/09/653,573
; CURRENT FILING DATE: 2000-08-31
; PRIOR APPLICATION NUMBER: 09/653,573
; PRIOR FILING DATE: 2000-08-31
; NUMBER OF SEQ ID NOS: 7
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 4
; LENGTH: 26
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-653-573-4

Query Match          5.8%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 40;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 45 TCTAACCCCTAACTGAGAAGGCGGTAG 70
Db 1 TCTAACCCCTAACTGAGAAGGCGGTAG 26

RESULT 67
US-09-653-573-5/c
; Sequence 5, Application US/09653573
; Patent No. 6607898
; GENERAL INFORMATION:
; APPLICANT: Kopreski, Michael S.
; APPLICANT: Gocke, Christopher D.
; TITLE OF INVENTION: Method for Detection of hTR and hTERT
; FILE REFERENCE: 00-1328
; CURRENT APPLICATION NUMBER: US/09/653,573
; CURRENT FILING DATE: 2000-08-31
; PRIOR APPLICATION NUMBER: 09/653,573
; PRIOR FILING DATE: 2000-08-31
; NUMBER OF SEQ ID NOS: 7
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 5
; LENGTH: 26
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-653-573-5

Query Match          5.8%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 40;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 145 CTTCCACCGTTCAATCTAGAGCAAAAC 170
Db 26 CTTCCACCGTTCAATCTAGAGCAAAAC 1
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RESULT 68  
US-09-402-181B-597  
; Sequence 597, Application US/09402181B  
; Patent No. 6610839  
; GENERAL INFORMATION:  
; APPLICANT: Cech, Thomas R.  
; Lingner, Joachim  
; Nakamura, Toru  
; Chapman, Karen B.  
; Morin, Gregg B.  
; Harley, Calvin B.  
; Andrews, William H.  
; TITLE OF INVENTION: Human Telomerase Catalytic Subunit  
; NUMBER OF SEQUENCES: 633  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Townsend and Townsend and Crew LLP  
; STREET: Two Embarcadero Center, Eighth Floor  
; CITY: San Francisco  
; STATE: California  
; COUNTRY: USA  
; ZIP: 94111-3834  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.30  
; CURRENT APPLICATION NUMBER: US/09/402,181B  
; FILING DATE: 29-Sep-1997  
; CLASSIFICATION: <Unknown>  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/724,643  
; FILING DATE: 01-OCT-1996  
; APPLICATION NUMBER: US 08/844,419  
; FILING DATE: 18-APR-1997  
; APPLICATION NUMBER: US 08/846,017  
; FILING DATE: 25-APR-1997  
; APPLICATION NUMBER: US 08/851,843  
; FILING DATE: 06-MAY-1997  
; APPLICATION NUMBER: US 08/854,050  
; FILING DATE: 09-MAY-1997  
; APPLICATION NUMBER: US 08/911,312  
; FILING DATE: 14-AUG-1997  
; APPLICATION NUMBER: US 08/912,951  
; FILING DATE: 14-AUG-1997  
; APPLICATION NUMBER: US 08/915,503  
; FILING DATE: 14-AUG-1997  
; APPLICATION NUMBER: WO PCT/US97/17885  
; FILING DATE: 01-OCT-1997  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Ausenhus, Scott L.  
; REGISTRATION NUMBER: 42,271  
; REFERENCE/DOCKET NUMBER: 015389-002620US  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (415) 576-0200  
; TELEFAX: (415) 576-0300  
; INFORMATION FOR SEQ ID NO: 597:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 26 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: DNA  
; FEATURE:  
; NAME/KEY: -  
; LOCATION: 1..26  
; OTHER INFORMATION: /note= "F3b primer"  
; SEQUENCE DESCRIPTION: SEQ ID NO: 597:  
US-09-402-181B-597

Query Match

5.8%; Score 26; DB 1; Length 26;

Best Local Similarity 100.0%; Pred. No. 40;  
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Qy 45 TCTAACCCCTAACTGAGAGGGCGTAG 70  
|||||  
Db 1 TCTAACCCCTAACTGAGAGGGCGTAG 26  
RESULT 69  
US-09-402-181B-598/c  
; Sequence 598, Application US/09402181B  
; Patent No. 6610839  
; GENERAL INFORMATION:  
; APPLICANT: Cech, Thomas R.  
; Lingner, Joachim  
; Nakamura, Toru  
; Chapman, Karen B.  
; Morin, Gregg B.  
; Harley, Calvin B.  
; Andrews, William H.  
; TITLE OF INVENTION: Human Telomerase Catalytic Subunit  
; NUMBER OF SEQUENCES: 633  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Townsend and Townsend and Crew LLP  
; STREET: Two Embarcadero Center, Eighth Floor  
; CITY: San Francisco  
; STATE: California  
; COUNTRY: USA  
; ZIP: 94111-3834  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.30  
; CURRENT APPLICATION NUMBER: US/09/402,181B  
; FILING DATE: 29-Sep-1997  
; CLASSIFICATION: <Unknown>  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/724,643  
; FILING DATE: 01-OCT-1996  
; APPLICATION NUMBER: US 08/844,419  
; FILING DATE: 18-APR-1997  
; APPLICATION NUMBER: US 08/846,017  
; FILING DATE: 25-APR-1997  
; APPLICATION NUMBER: US 08/851,843  
; FILING DATE: 06-MAY-1997  
; APPLICATION NUMBER: US 08/854,050  
; FILING DATE: 09-MAY-1997  
; APPLICATION NUMBER: US 08/911,312  
; FILING DATE: 14-AUG-1997  
; APPLICATION NUMBER: US 08/912,951  
; FILING DATE: 14-AUG-1997  
; APPLICATION NUMBER: US 08/915,503  
; FILING DATE: 14-AUG-1997  
; APPLICATION NUMBER: WO PCT/US97/17885  
; FILING DATE: 01-OCT-1997  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Ausenhus, Scott L.  
; REGISTRATION NUMBER: 42,271  
; REFERENCE/DOCKET NUMBER: 015389-002620US  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (415) 576-0200  
; TELEFAX: (415) 576-0300  
; INFORMATION FOR SEQ ID NO: 598:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 26 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: DNA  
; FEATURE:  
; NAME/KEY: -

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;
; LOCATION: 1..26
; OTHER INFORMATION: /note= "R3c primer"
; SEQUENCE DESCRIPTION: SEQ ID NO: 598:
US-09-402-181B-598

Query Match          5.8%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 40;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 145 CTTCCACGGTTCATTCTAGAGCAAC 170
      |||
Db 26 CTTCCACGGTTCATTCTAGAGCAAC 1

RESULT 70
US-09-721-456-597
; Sequence 597, Application US/09721456
; Patent No. 6617110
; GENERAL INFORMATION:
; APPLICANT: Cech, Thomas R.
; Lingner, Joachim
; Nakamura, Toru
; Chapman, Karen B.
; Morin, Gregg B.
; Harley, Calvin B.
; Andrews, William H.
; TITLE OF INVENTION: Human Telomerase Catalytic Subunit
; NUMBER OF SEQUENCES: 727
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/721,456
; FILING DATE: 22-NOV-1997
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/08/974,549A
; FILING DATE: 19-NOV-1997
; APPLICATION NUMBER: US 08/724,643
; FILING DATE: 01-OCT-1996
; APPLICATION NUMBER: US 08/844,419
; FILING DATE: 18-APR-1997
; APPLICATION NUMBER: US 08/846,017
; FILING DATE: 25-APR-1997
; APPLICATION NUMBER: US 08/851,843
; FILING DATE: 06-MAY-1997
; APPLICATION NUMBER: US 08/854,050
; FILING DATE: 09-MAY-1997
; APPLICATION NUMBER: US 08/911,312
; FILING DATE: 14-AUG-1997
; APPLICATION NUMBER: US 08/912,951
; FILING DATE: 14-AUG-1997
; APPLICATION NUMBER: US 08/915,503
; FILING DATE: 14-AUG-1997
; APPLICATION NUMBER: WO PCT/US97/17618
; FILING DATE: 01-OCT-1997
; APPLICATION NUMBER: WO PCT/US97/17885
; FILING DATE: 01-OCT-1997
; ATTORNEY/AGENT INFORMATION:
; NAME: Apple, Randolph Ted
; REGISTRATION NUMBER: 36,429
; REFERENCE/DOCKET NUMBER: 015389-002610US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200

;
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 597:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 26 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
; FEATURE:
; NAME/KEY: -
; LOCATION: 1..26
; OTHER INFORMATION: /note= "R3b primer"
; SEQUENCE DESCRIPTION: SEQ ID NO: 597:
US-09-721-456-597

Query Match          5.8%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 40;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 45 TCTAACCCCTAACTGAGAGGGCGTAG 70
      |||
Db 1 TCTAACCCCTAACTGAGAGGGCGTAG 26

RESULT 71
US-09-721-456-598/c
; Sequence 598, Application US/09721456
; Patent No. 6617110
; GENERAL INFORMATION:
; APPLICANT: Cech, Thomas R.
; Lingner, Joachim
; Nakamura, Toru
; Chapman, Karen B.
; Morin, Gregg B.
; Harley, Calvin B.
; Andrews, William H.
; TITLE OF INVENTION: Human Telomerase Catalytic Subunit
; NUMBER OF SEQUENCES: 727
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/721,456
; FILING DATE: 22-NOV-1997
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/08/974,549A
; FILING DATE: 19-NOV-1997
; APPLICATION NUMBER: US 08/724,643
; FILING DATE: 01-OCT-1996
; APPLICATION NUMBER: US 08/844,419
; FILING DATE: 18-APR-1997
; APPLICATION NUMBER: US 08/846,017
; FILING DATE: 25-APR-1997
; APPLICATION NUMBER: US 08/851,843
; FILING DATE: 06-MAY-1997
; APPLICATION NUMBER: US 08/854,050
; FILING DATE: 09-MAY-1997
; APPLICATION NUMBER: US 08/911,312
; FILING DATE: 14-AUG-1997
; APPLICATION NUMBER: US 08/912,951
; FILING DATE: 14-AUG-1997
; APPLICATION NUMBER: US 08/915,503
; FILING DATE: 14-AUG-1997
; APPLICATION NUMBER: WO PCT/US97/17618
; FILING DATE: 01-OCT-1997
; APPLICATION NUMBER: WO PCT/US97/17885
; FILING DATE: 01-OCT-1997
; ATTORNEY/AGENT INFORMATION:
; NAME: Apple, Randolph Ted
; REGISTRATION NUMBER: 36,429
; REFERENCE/DOCKET NUMBER: 015389-002610US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
```

```
/ APPLICATION NUMBER: WO PCT/US97/17618
/ FILING DATE: 01-OCT-1997
/ APPLICATION NUMBER: WO PCT/US97/17885
/ FILING DATE: 01-OCT-1997
/ ATTORNEY/AGENT INFORMATION:
/ NAME: Apple, Randolph Ted
/ REGISTRATION NUMBER: 36,429
/ REFERENCE/DOCKET NUMBER: 015389-002610US
/ TELECOMMUNICATION INFORMATION:
/ TELEPHONE: (415) 576-0200
/ TELEFAX: (415) 576-0300
/ INFORMATION FOR SEQ ID NO: 598:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 26 base pairs
/ TYPE: nucleic acid
/ STRANDEDNESS: single
/ TOPOLOGY: linear
/ MOLECULE TYPE: DNA
/ FEATURE:
/ NAME/KEY: -
/ LOCATION: 1..26
/ OTHER INFORMATION: /note= "R3c primer"
/ SEQUENCE DESCRIPTION: SEQ ID NO: 598:
US-09-721-456-598

Query Match 5.8%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 40;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 145 CTTCCACCGTTCATTCTAGAGCAAC 170
Db 26 CTTCCACCGTTCATTCTAGAGCAAC 1

RESULT 72
US-08-630-019A-26
; Sequence 26, Application US/08630019A
; Patent No. 6015710
; GENERAL INFORMATION:
; APPLICANT: Shay, Jerry W.
; APPLICANT: Wright, Woodring E.
; APPLICANT: Piatyszek, Mieczyslaw A.
; APPLICANT: Corey, David
; APPLICANT: No. 6015710ton, James C.
; TITLE OF INVENTION: Modulation of Mammalian Telomerase by
; TITLE OF INVENTION: Peptide Nucleic Acids
; NUMBER OF SEQUENCES: 46
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; FILING DATE: 09-JUN-1996
; CLASSIFICATION: 536
; ATTORNEY/AGENT INFORMATION:
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-001600US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 26:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 25 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: RNA (genomic)
; INFORMATION FOR SEQ ID NO: 26:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 25 base pairs
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/ TYPE: nucleic acid
/ STRANDEDNESS: single
/ TOPOLOGY: linear
/ MOLECULE TYPE: other nucleic acid
/ DESCRIPTION: /desc = "peptide nucleic acid (PNA),
/ DESCRIPTION: where (deoxy)ribose-phosphate linkages are replaced by
/ DESCRIPTION: N-(2-aminoethyl)glycine units linked to nucleotide bases via
/ DESCRIPTION: glycine amino nitrogen through a methylenecarbonyl linker"
US-08-630-019A-26

Query Match 5.5%; Score 25; DB 1; Length 25;
Best Local Similarity 72.0%; Pred. No. 45;
Matches 18; Conservative 7; Mismatches 0; Indels 0; Gaps 0;

QY 41 TTTGTCTAACCTTAACCTGAGAAGGG 65
Db 1 UUUGUCUAAACCCUACUGAGAAGGG 25

RESULT 73
US-08-630-019A-36
; Sequence 36, Application US/08630019A
; Patent No. 6015710
; GENERAL INFORMATION:
; APPLICANT: Shay, Jerry W.
; APPLICANT: Wright, Woodring E.
; APPLICANT: Piatyszek, Mieczyslaw A.
; APPLICANT: Corey, David
; APPLICANT: No. 6015710ton, James C.
; TITLE OF INVENTION: Modulation of Mammalian Telomerase by
; TITLE OF INVENTION: Peptide Nucleic Acids
; NUMBER OF SEQUENCES: 46
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; FILING DATE: 09-JUN-1996
; CLASSIFICATION: 536
; ATTORNEY/AGENT INFORMATION:
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-001600US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 36:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 25 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: RNA (genomic)
; INFORMATION FOR SEQ ID NO: 36:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 25 base pairs
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Query Match 5.5%; Score 25; DB 1; Length 25;
Best Local Similarity 72.0%; Pred. No. 45;
Matches 18; Conservative 7; Mismatches 0; Indels 0; Gaps 0;

QY 41 TTTGTCTAACCTTAACCTGAGAAGGG 65
Db 1 UUUGUCUAAACCCUACUGAGAAGGG 25
```

```

? CITY: San Francisco
? STATE: California
? COUNTRY: USA
? ZIP: 94111-3834
? COMPUTER READABLE FORM:
? MEDIUM TYPE: Floppy disk
? OPERATING SYSTEM: PC-DOS/MS-DOS
? SOFTWARE: Patent In Release #1.0, Version #1.30
? CURRENT APPLICATION DATA:
? APPLICATION NUMBER: US/09/349,532
? FILING DATE:
? CLASSIFICATION:
? PRIOR APPLICATION DATA:
? APPLICATION NUMBER: US 08/838,545
? FILING DATE: 09-APR-1997
? APPLICATION NUMBER: US 08/630,019
? FILING DATE: 09-APR-1996
? ATTORNEY/AGENT INFORMATION:
? NAME: Scorella, John R.
? REGISTRATION NUMBER: 32,944
? REFERENCE/DOCKET NUMBER: 015389-001610US
? TELECOMMUNICATION INFORMATION:
? TELEPHONE: (415) 576-0200
? TELEFAX: (415) 576-0300
? INFORMATION FOR SEQ ID NO: 40:
? SEQUENCE CHARACTERISTICS:
? LENGTH: 25 base pairs
? TYPE: nucleic acid
? STRANDEDNESS: single
? TOPOLOGY: linear
? MOLECULE TYPE: RNA (genomic)
? US-09-349-532-40

Query Match          5.5%;   Score 25;   DB 1;   Length 25;
Best Local Similarity 72.0%;   Pred: No. 45;
Matches 18; Conservative 7; Mismatches 0; Indels

QY      41 TTTGTCCTAACCCTAACGTGAGAAGG 65
        ::::|::|::|::|::|::|::|::|
DB       1 UUUUGUCUACCUCUACUGAAGGG 25

RESULT 76
US-08-482-115B-28/c
? Sequence 28, Application US/08482115B
? Patent No. 5776679
? GENERAL INFORMATION:
? APPLICANT: Villeponteau, Bryant
? APPLICANT: Feng, Junli
? APPLICANT: Funk, Walter
? APPLICANT: Andrews, William H.
? TITLE OF INVENTION: Assays for the RNA Component of Human
? TITLE OF INVENTION: Telomerase
? NUMBER OF SEQUENCES: 40
? CORRESPONDENCE ADDRESS:
? ADDRESSEE: Townsend and Townsend and Crew LLP
? STREET: Two Embarcadero Center, Eighth Floor
? CITY: San Francisco
? STATE: California
? COUNTRY: USA
? ZIP: 94111-3834
? COMPUTER READABLE FORM:
? MEDIUM TYPE: Floppy disk
? OPERATING SYSTEM: PC-DOS/MS-DOS
? SOFTWARE: Patent In Release #1.0, Version #1.30
? CURRENT APPLICATION DATA:
? APPLICATION NUMBER: US/08/482,115B
? FILING DATE: 07-JUN-1995
? CLASSIFICATION: 435
? PRIOR APPLICATION DATA:
? APPLICATION NUMBER: US 08/272,102

```

```
; FILING DATE: 07-JUL-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/330,123
; FILING DATE: 27-OCT-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-000830US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 28:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 28 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
US-08-482-115B-28

Query Match 5.5%; Score 25; DB 1; Length 28;
Best Local Similarity 100.0%; Pred. No. 52;
Matches 25; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 81 TTGTCTCCCGCGCGCTGTTTTCT 105
Db 25 TTGTCTCCCGCGCGCTGTTTTCT 1

RESULT 77
US-08-472-802C-29/c
; Sequence 29, Application US/08472802C
; Patent No. 5958680
; GENERAL INFORMATION:
; APPLICANT: Villeponteau, Bryant
; APPLICANT: Feng, Junli
; APPLICANT: Andrews, William H.
; TITLE OF INVENTION: Mammalian Telomerase
; NUMBER OF SEQUENCES: 44
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/472,802C
; FILING DATE: 07-JUN-1995
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/272,102
; FILING DATE: 07-JUL-1994
; INFORMATION FOR SEQ ID NO: 29:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 28 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
US-08-482-115B-28
```

```
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
US-08-472-802C-29

Query Match 5.5%; Score 25; DB 1; Length 28;
Best Local Similarity 100.0%; Pred. No. 52;
Matches 25; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 81 TTGTCTCCCGCGCGCTGTTTTCT 105
Db 25 TTGTCTCCCGCGCGCTGTTTTCT 1

RESULT 78
US-09-057-351-29/c
; Sequence 29, Application US/09057351
; Patent No. 6548298
; GENERAL INFORMATION:
; APPLICANT: Villeponteau, Bryant
; APPLICANT: Feng, Junli
; APPLICANT: Funk, Walter
; APPLICANT: Andrews, William H.
; TITLE OF INVENTION: Mammalian Telomerase
; NUMBER OF SEQUENCES: 42
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/057,351
; FILING DATE: 08-APR-1994
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/272,102
; FILING DATE: 07-JUL-1994
; INFORMATION FOR SEQ ID NO: 29:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 28 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
US-09-057-351-29

Query Match 5.5%; Score 25; DB 1; Length 28;
Best Local Similarity 100.0%; Pred. No. 52;
Matches 25; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 81 TTGTCTCCCGCGCGCTGTTTTCT 105
Db 25 TTGTCTCCCGCGCGCTGTTTTCT 1
```



RESULT 79  
US-08-770-565-2/c  
; Sequence 2, Application US/08770565  
; Patent No. 5846723  
; GENERAL INFORMATION:  
; APPLICANT: Kim, Nam Woo  
; APPLICANT: Wu, Fred  
; APPLICANT: Kealey, James T.  
; APPLICANT: Pruzan, Ronald  
; APPLICANT: Weinrich, Scott L.  
; TITLE OF INVENTION: Methods for Detecting the RNA Component of  
; TITLE OF INVENTION: Telomerase  
; NUMBER OF SEQUENCES: 26  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: TOWNSEND and TOWNSEND and CREW LLP  
; STREET: Two Embarcadero Center, 8th Floor  
; CITY: San Francisco  
; STATE: California  
; COUNTRY: USA  
; ZIP: 94111-3834  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.30  
; CURRENT APPLICATION NUMBER: US/08/770,565  
; FILING DATE: 20-DEC-1996  
; CLASSIFICATION: 435  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Storella, John R.  
; REGISTRATION NUMBER: 32,944  
; REFERENCE/DOCKET NUMBER: 015389-002300US  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: 415-576-0200  
; TELEFAX: 415-576-0300  
; INFORMATION FOR SEQ ID NO: 2:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 30 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: DNA  
US-08-770-565-2  
Query Match 5.4%; Score 24.4; DB 1; Length 30;  
Best Local Similarity 96.2%; Pred. No. 62;  
Matches 25; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
Qy 355 CCTTTCAGGCGCAGGAGGAGGACG 380  
Db 26 CGTTTCAGGCGCAGGAGGAGGACG 1  
RESULT 80  
US-08-838-545-25  
; Sequence 25, Application US/08838545  
; Patent No. 6046307  
; GENERAL INFORMATION:  
; APPLICANT: Shay, Jerry W.  
; APPLICANT: Wright, Woodring E.  
; APPLICANT: Piatyszek, Mieczyslaw A.  
; APPLICANT: Corey, David R.  
; APPLICANT: No. 6046307ton, James C.  
; TITLE OF INVENTION: Modulation of Mammalian Telomerase by  
; TITLE OF INVENTION: Peptide Nucleic Acids  
; NUMBER OF SEQUENCES: 60  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Townsend and Townsend and Crew LLP  
; STREET: Two Embarcadero Center, Eighth Floor  
; CITY: San Francisco  
; STATE: California

; COUNTRY: USA  
; ZIP: 94111-3834  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/838,545  
; FILING DATE: 09-APR-1997  
; CLASSIFICATION: 536  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/630,019  
; FILING DATE: 09-APR-1996  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Storella, John R.  
; REGISTRATION NUMBER: 32,944  
; REFERENCE/DOCKET NUMBER: 015389-001610US  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (415) 576-0200  
; TELEFAX: (415) 576-0300  
; INFORMATION FOR SEQ ID NO: 25:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 24 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: other nucleic acid  
; DESCRIPTION: /desc = "peptide nucleic acid (PNA),  
; DESCRIPTION: where (deoxy(ribose-phosphate linkages are replaced by  
; DESCRIPTION: N-(2-aminoethyl)glycine units linked to nucleotide bases via  
; DESCRIPTION: glycine amino N through a methylenecarbonyl linker"  
US-08-838-545-25  
Query Match 5.3%; Score 24; DB 1; Length 24;  
Best Local Similarity 100.0%; Pred. No. 52;  
Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Qy 41 TTTGTCTAACCTTAACCTGAGAAGG 64  
Db 1 TTTGTCTAACCTTAACCTGAGAAGG 24  
RESULT 81  
US-09-349-532-25  
; Sequence 25, Application US/09349532  
; Patent No. 6294650  
; GENERAL INFORMATION:  
; APPLICANT: Shay, Jerry W.  
; APPLICANT: Wright, Woodring E.  
; APPLICANT: Piatyszek, Mieczyslaw A.  
; APPLICANT: Corey, David R.  
; APPLICANT: No. 6294650ton, James C.  
; TITLE OF INVENTION: Modulation of Mammalian Telomerase by  
; TITLE OF INVENTION: Peptide Nucleic Acids  
; NUMBER OF SEQUENCES: 60  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Townsend and Townsend and Crew LLP  
; STREET: Two Embarcadero Center, Eighth Floor  
; CITY: San Francisco  
; STATE: California  
; COUNTRY: USA  
; ZIP: 94111-3834  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/09/349,532  
; FILING DATE:  
; CLASSIFICATION:  
; PRIOR APPLICATION DATA:

/ APPLICATION NUMBER: US 08/838,545  
/ FILING DATE: 09-APR-1997  
/ APPLICATION NUMBER: US 08/630,019  
/ FILING DATE: 09-APR-1996  
/ ATTORNEY/AGENT INFORMATION:  
/ NAME: Storella, John R.  
/ REGISTRATION NUMBER: 32,944  
/ REFERENCE/DOCKET NUMBER: 015389-001610US  
/ TELECOMMUNICATION INFORMATION:  
/ TELEPHONE: (415) 576-0200  
/ TELEFAX: (415) 576-0300  
/ INFORMATION FOR SEQ ID NO: 25:  
/ SEQUENCE CHARACTERISTICS:  
/ LENGTH: 24 base pairs  
/ TYPE: nucleic acid  
/ STRANDEDNESS: single  
/ TOPOLOGY: linear  
/ MOLECULE TYPE: other nucleic acid  
/ DESCRIPTION: /desc = "peptide nucleic acid (PNA),  
/ DESCRIPTION: where (deoxy(ribose-phosphate linkages are replaced by  
/ DESCRIPTION: N-(2-aminoethyl)glycine units linked to nucleotide bases via  
/ DESCRIPTION: glycine amino N through a methylenecarbonyl linker"  
US-09-349-532-25

Query Match 5.3%; Score 24; DB 1; Length 24;  
Best Local Similarity 100.0%; Pred. No. 52;  
Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 41 TTTGTCTAACCTTAAGGAGG 64  
|||||  
Db 1 TTTGTCTAACCTTAAGGAGG 24

RESULT 82  
US-09-018-125-4  
/ Sequence 4, Application US/09018125A  
/ Patent No. 6468983  
/ GENERAL INFORMATION:  
/ APPLICANT: Silverman, Robert H.  
/ APPLICANT: Kondo, Seiji  
/ APPLICANT: Cowell, John K.  
/ APPLICANT: Li, Guiying  
/ APPLICANT: Torrence, Paul F.  
/ TITLE OF INVENTION: RNASE L ACTIVATORS AND ANTISENSE OLIGONUCLEOTIDES  
/ TITLE OF INVENTION: EFFECTIVE TO TREAT TELOMERASE-EXPRESSING MALIGNANCIES  
/ FILE REFERENCE: 8656-022  
/ CURRENT APPLICATION NUMBER: US/09/018,125A  
/ CURRENT FILING DATE: 1999-02-03  
/ EARLIER APPLICATION NUMBER: 60/044,507  
/ EARLIER FILING DATE: 1997-04-21  
/ NUMBER OF SEQ ID NOS: 9  
/ SOFTWARE: PatentIn Ver. 2.0  
/ SEQ ID NO 4  
/ LENGTH: 24  
/ TYPE: DNA  
/ ORGANISM: Artificial Sequence  
/ FEATURE:  
/ OTHER INFORMATION: Description of Artificial Sequence: primer  
US-09-018-125-4

Query Match 5.3%; Score 24; DB 1; Length 24;  
Best Local Similarity 100.0%; Pred. No. 52;  
Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 41 TTTGTCTAACCTTAAGGAGG 64  
|||||  
Db 1 TTTGTCTAACCTTAAGGAGG 24

RESULT 83  
US-09-018-125-5/c  
/ Sequence 5, Application US/09018125A  
/ Patent No. 6468983

/ GENERAL INFORMATION:  
/ APPLICANT: Silverman, Robert H.  
/ APPLICANT: Kondo, Seiji  
/ APPLICANT: Cowell, John K.  
/ APPLICANT: Li, Guiying  
/ APPLICANT: Torrence, Paul F.  
/ TITLE OF INVENTION: RNASE L ACTIVATORS AND ANTISENSE OLIGONUCLEOTIDES  
/ TITLE OF INVENTION: EFFECTIVE TO TREAT TELOMERASE-EXPRESSING MALIGNANCIES  
/ FILE REFERENCE: 8656-022  
/ CURRENT APPLICATION NUMBER: US/09/018,125A  
/ CURRENT FILING DATE: 1999-02-03  
/ EARLIER APPLICATION NUMBER: 60/044,507  
/ EARLIER FILING DATE: 1997-04-21  
/ NUMBER OF SEQ ID NOS: 9  
/ SOFTWARE: PatentIn Ver. 2.0  
/ SEQ ID NO 5  
/ LENGTH: 24  
/ TYPE: DNA  
/ ORGANISM: Artificial Sequence  
/ FEATURE:  
/ OTHER INFORMATION: Description of Artificial Sequence: primer  
US-09-018-125-5

Query Match 5.3%; Score 24; DB 1; Length 24;  
Best Local Similarity 100.0%; Pred. No. 52;  
Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 423 CGTGACCCAGGACTCGGCTCACA 446  
|||||  
Db 24 CGTGACCCAGGACTCGGCTCACA 1

RESULT 84  
US-08-838-545-26  
/ Sequence 26, Application US/08838545  
/ Patent No. 6046307  
/ GENERAL INFORMATION:  
/ APPLICANT: Shay, Jerry W.  
/ APPLICANT: Wright, Woodring E.  
/ APPLICANT: Piatyzek, Mieczyslaw A.  
/ APPLICANT: Corey, David R.  
/ APPLICANT: No. 6046307ton, James C.  
/ TITLE OF INVENTION: Modulation of Mammalian Telomerase by  
/ TITLE OF INVENTION: Peptide Nucleic Acids  
/ NUMBER OF SEQUENCES: 60  
/ CORRESPONDENCE ADDRESS:  
/ ADDRESSEE: Townsend and Townsend and Crew LLP  
/ STREET: Two Embarcadero Center, Eighth Floor  
/ CITY: San Francisco  
/ STATE: California  
/ COUNTRY: USA  
/ ZIP: 94111-3834  
/ COMPUTER READABLE FORM:  
/ MEDIUM TYPE: Floppy disk  
/ COMPUTER: IBM PC compatible  
/ OPERATING SYSTEM: PC-DOS/MS-DOS  
/ SOFTWARE: PatentIn Release #1.0, Version #1.30  
/ CURRENT APPLICATION DATA:  
/ APPLICATION NUMBER: US/08/838,545  
/ FILING DATE: 09-APR-1997  
/ CLASSIFICATION: 536  
/ PRIOR APPLICATION DATA:  
/ APPLICATION NUMBER: US 08/630,019  
/ FILING DATE: 09-APR-1996  
/ ATTORNEY/AGENT INFORMATION:  
/ NAME: Storella, John R.  
/ REGISTRATION NUMBER: 32,944  
/ REFERENCE/DOCKET NUMBER: 015389-001610US  
/ TELECOMMUNICATION INFORMATION:  
/ TELEPHONE: (415) 576-0200  
/ TELEFAX: (415) 576-0300  
/ INFORMATION FOR SEQ ID NO: 26:  
/ SEQUENCE CHARACTERISTICS:

LENGTH: 23 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: other nucleic acid  
DESCRIPTION: /desc = "peptide nucleic acid (PNA),  
DESCRIPTION: where (deoxy(ribose-phosphate linkages are replaced by  
DESCRIPTION: N-(2-aminoethyl)glycine units linked to nucleotide bases via  
DESCRIPTION: glycine amino N through a methylenecarbonyl linker"  
US-08-838-545-26

Query Match 5.1%; Score 23; DB 1; Length 23;  
Best Local Similarity 100.0%; Pred. No. 58;  
Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 35 CCATTTTGTCTAACCCCTAACT 57  
|||||  
Db 1 CCATTTTGTCTAACCCCTAACT 23

RESULT 85  
US-09-349-532-26  
Sequence 26, Application US/09349532  
Patent No. 6294650  
GENERAL INFORMATION:  
APPLICANT: Shay, Jerry W.  
APPLICANT: Wright, Woodring E.  
APPLICANT: Piatyszek, Mieczyslaw A.  
APPLICANT: Corey, David R.  
APPLICANT: No. 6294650on, James C.  
TITLE OF INVENTION: Modulation of Mammalian Telomerase by  
NUMBER OF SEQUENCES: 60  
CORRESPONDENCE ADDRESSES:  
ADDRESSEE: Townsend and Townsend and Crew LLP  
STREET: Two Embarcadero Center, Eighth Floor  
CITY: San Francisco  
STATE: California  
COUNTRY: USA  
ZIP: 94111-3834

COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/09/349,532  
FILING DATE:

CLASSIFICATION:  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/838,545  
FILING DATE: 09-APR-1997  
APPLICATION NUMBER: US 08/630,019  
FILING DATE: 09-APR-1996  
ATTORNEY/AGENT INFORMATION:  
NAME: Storella, John R.  
REGISTRATION NUMBER: 32,944  
REFERENCE/DOCKET NUMBER: 015389-001610US  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (415) 576-0200  
TELEFAX: (415) 576-0300  
INFORMATION FOR SEQ ID NO: 26:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 23 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear

MOLECULE TYPE: other nucleic acid  
DESCRIPTION: /desc = "peptide nucleic acid (PNA),  
DESCRIPTION: where (deoxy(ribose-phosphate linkages are replaced by  
DESCRIPTION: N-(2-aminoethyl)glycine units linked to nucleotide bases via  
DESCRIPTION: glycine amino N through a methylenecarbonyl linker"  
US-09-349-532-26

Query Match 5.1%; Score 23; DB 1; Length 23;  
Best Local Similarity 100.0%; Pred. No. 58;  
Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 35 CCATTTTGTCTAACCCCTAACT 57  
|||||  
Db 1 CCATTTTGTCTAACCCCTAACT 23

RESULT 86  
US-08-485-778-20  
Sequence 20, Application US/08485778  
Patent No. 5878979  
GENERAL INFORMATION:  
APPLICANT: Andrews, William H.  
APPLICANT: Avilion, Ariel Athena  
APPLICANT: Feng, Junli  
APPLICANT: Funk, Walter  
APPLICANT: Greider, Carol  
APPLICANT: Mathuenda, Maria Antonia Blasco  
APPLICANT: Villeponteau, Bryant  
TITLE OF INVENTION: RNA COMPONENT OF TELOMERASE  
NUMBER OF SEQUENCES: 45  
CORRESPONDENCE ADDRESSES:  
ADDRESSEE: Hamilton, Brook, Smith & Reynolds, P.C.  
STREET: Two Militia Drive  
CITY: Lexington  
STATE: MA  
COUNTRY: US  
ZIP: 02173

COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/485,778  
FILING DATE: 07-JE-1995  
CLASSIFICATION: 435

PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/387,524  
FILING DATE: 13-FEB-1995  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/330,123  
FILING DATE: 27-OCT-1994  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/272,102  
FILING DATE: 07-JUL-1994

ATTORNEY/AGENT INFORMATION:  
NAME: Granahan, Patricia  
REGISTRATION NUMBER: 32,227  
REFERENCE/DOCKET NUMBER: CSHL94-05A4  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 617-861-6240  
TELEFAX: 617-861-9540  
INFORMATION FOR SEQ ID NO: 20:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 27 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
US-08-485-778-20

Query Match 5.1%; Score 23; DB 1; Length 27;  
Best Local Similarity 100.0%; Pred. No. 70;  
Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 22 GGAGGGGTGGTGGCCATTTTGG 44  
|||||  
Db 5 GGAGGGGTGGTGGCCATTTTGG 27

## RESULT 87

US-08-520-550A-20  
; Sequence 20, Application US/08520550A  
; Patent No. 6013468  
; GENERAL INFORMATION:  
; APPLICANT: Andrews, William H.  
; APPLICANT: Avillion, Ariel A.  
; APPLICANT: Feng, Junli  
; APPLICANT: Funk, Walter  
; APPLICANT: Greider, Carol  
; APPLICANT: Marhuenda, Maria A. B.  
; APPLICANT: Villeponteau, Bryant  
; TITLE OF INVENTION: RNA Component of Telomerase  
; NUMBER OF SEQUENCES: 47  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Hamilton, Brook, Smith & Reynolds, P.C.  
; STREET: Two Militia Drive  
; CITY: Lexington  
; STATE: MA  
; COUNTRY: US  
; ZIP: 02173  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/520,550A  
; FILING DATE: 29-AUG-1995  
; CLASSIFICATION: 435  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/387,524  
; FILING DATE: 13-FEB-1995  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/330,123  
; FILING DATE: 27-OCT-1994  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/272,102  
; FILING DATE: 07-JUL-1994  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Granahan, Patricia  
; REGISTRATION NUMBER: 32,227  
; REFERENCE/DOCKET NUMBER: CSHL94-05A3B  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: 617-861-6240  
; TELEFAX: 617-861-9540  
; INFORMATION FOR SEQ ID NO: 20:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 27 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; US-08-520-550A-20

Query Match 5.1%; Score 23; DB 1; Length 27;  
Best Local Similarity 100.0%; Pred. No. 70;  
Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 22 GGAGGGGTGGTGGCCATTTTTG 44  
Db 5 GGAGGGGTGGTGGCCATTTTTG 27

## RESULT 88

US-08-330-123A-5/c  
; Sequence 5, Application US/08330123A  
; Patent No. 5583016  
; GENERAL INFORMATION:  
; APPLICANT: VILLEPONTEAU, Bryant  
; APPLICANT: FENG, Junli  
; APPLICANT: FUNK, Walter  
; APPLICANT: ANDREWS, William H.  
; TITLE OF INVENTION: HUMAN TELOMERASE

; NUMBER OF SEQUENCES: 25  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Townsend and Townsend Khourie and Crew  
; STREET: 379 Lytton Avenue  
; CITY: Palo Alto  
; STATE: California  
; COUNTRY: US  
; ZIP: 94301  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.25  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/330,123A  
; FILING DATE: 27-OCT-1994  
; CLASSIFICATION: 435  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/272,102  
; FILING DATE: 07-JUL-1994  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Smith, William M  
; REGISTRATION NUMBER: 30,223  
; REFERENCE/DOCKET NUMBER: 15389-000810  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (415) 326-2400  
; TELEFAX: (415) 326-2422  
; INFORMATION FOR SEQ ID NO: 5:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 22 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: RNA  
; US-08-330-123A-5

Query Match 4.9%; Score 22; DB 1; Length 22;  
Best Local Similarity 100.0%; Pred. No. 66;  
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 46 CTAACCTTAAGTGAAGGGCG 67  
Db 22 CTAACCTTAAGTGAAGGGCG 1

## RESULT 89

US-08-330-123A-6/c  
; Sequence 6, Application US/08330123A  
; Patent No. 5583016  
; GENERAL INFORMATION:  
; APPLICANT: VILLEPONTEAU, Bryant  
; APPLICANT: FENG, Junli  
; APPLICANT: FUNK, Walter  
; APPLICANT: ANDREWS, William H.  
; TITLE OF INVENTION: HUMAN TELOMERASE  
; NUMBER OF SEQUENCES: 25  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Townsend and Townsend Khourie and Crew  
; STREET: 379 Lytton Avenue  
; CITY: Palo Alto  
; STATE: California  
; COUNTRY: US  
; ZIP: 94301  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.25  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/330,123A  
; FILING DATE: 27-OCT-1994  
; CLASSIFICATION: 435  
; PRIOR APPLICATION DATA:

```
; APPLICATION NUMBER: US 08/272,102
; FILING DATE: 07-JUL-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: Smith, William M
; REGISTRATION NUMBER: 30,223
; REFERENCE/DOCKET NUMBER: 15389-000810
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 326-2400
; TELEFAX: (415) 326-2422
; INFORMATION FOR SEQ ID NO: 6:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 22 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: RNA
US-08-330-123A-6

Query Match 4.9%; Score 22; DB 1; Length 22;
Best Local Similarity 100.0%; Pred. No. 66;
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 54 AACTGAGAGGGCGTAGGCGCC 75
Db 22 AACTGAGAGGGCGTAGGCGCC 1

RESULT 90
US-08-482-115B-32/c
; Sequence 32, Application US/08482115B
; Patent No. 5776679
; GENERAL INFORMATION:
; APPLICANT: Villeponteau, Bryant
; APPLICANT: Feng, Junli
; APPLICANT: Funk, Walter
; APPLICANT: Andrews, William H.
; TITLE OF INVENTION: Assays for the RNA Component of Human
; TITLE OF INVENTION: Telomerase
; NUMBER OF SEQUENCES: 40
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; FILING DATE: 07-JUN-1995
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/272,102
; FILING DATE: 07-JUL-1994
; PRIOR APPLICATION NUMBER: US 08/330,123
; FILING DATE: 27-OCT-1994
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-000830US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0300
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 32:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 22 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
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; TOPOLOGY: linear
; MOLECULE TYPE: DNA
US-08-482-115B-32

Query Match 4.9%; Score 22; DB 1; Length 22;
Best Local Similarity 100.0%; Pred. No. 66;
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 183 CTGCTGGCCGCTTCGCCCTCC 204
Db 22 CTGCTGGCCGCTTCGCCCTCC 1

RESULT 91
US-08-660-678A-27/c
; Sequence 27, Application US/08660678A
; Patent No. 5837857
; GENERAL INFORMATION:
; APPLICANT: Villeponteau, Bryant
; APPLICANT: Feng, Junli
; APPLICANT: Funk, Walter
; APPLICANT: Andrews, William H.
; TITLE OF INVENTION: Mammalian Telomerase
; NUMBER OF SEQUENCES: 30
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/660,678A
; FILING DATE: 05-JUN-1996
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/330,123
; FILING DATE: 27-OCT-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/272,102
; FILING DATE: 07-JUL-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-000811US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 27:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 22 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
US-08-660-678A-27

Query Match 4.9%; Score 22; DB 1; Length 22;
Best Local Similarity 100.0%; Pred. No. 66;
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 46 CTAACCCCTACTGAGAGGGCG 67
Db 22 CTAACCCCTACTGAGAGGGCG 1

RESULT 92
US-08-660-678A-28/c
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; Sequence 28, Application US/08660678A  
; Patent No. 5837857  
; GENERAL INFORMATION:  
; APPLICANT: Villeponteau, Bryant  
; APPLICANT: Feng, Junli  
; APPLICANT: Funk, Walter  
; APPLICANT: Andrews, William H.  
; TITLE OF INVENTION: Mammalian Telomerase  
; NUMBER OF SEQUENCES: 30  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Townsend and Townsend and Crew LLP  
; STREET: Two Embarcadero Center, Eighth Floor  
; CITY: San Francisco  
; STATE: California  
; COUNTRY: USA  
; ZIP: 94111-3834  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/660,678A  
; FILING DATE: 05-JUN-1996  
; CLASSIFICATION: 435  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/330,123  
; FILING DATE: 27-OCT-1994  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/272,102  
; FILING DATE: 07-JUL-1994  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Storella, John R.  
; REGISTRATION NUMBER: 32,944  
; REFERENCE/DOCKET NUMBER: 015389-000811US  
; TELEPHONE: (415) 576-0200  
; TELEFAX: (415) 576-0300  
; INFORMATION FOR SEQ ID NO: 28:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 22 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: DNA  
US-08-660-678A-28

Query Match 4.9%; Score 22; DB 1; Length 22;  
Best Local Similarity 100.0%; Pred. No. 66;  
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 54 AACTGAGAGGGCGTAGGCCGC 75  
Db 22 AACTGAGAGGGCGTAGGCCGC 1

## RESULT 93

US-08-485-778-7/c  
; Sequence 7, Application US/08485778  
; Patent No. 5876979  
; GENERAL INFORMATION:  
; APPLICANT: Andrews, William H.  
; APPLICANT: Avilion, Ariel Athena  
; APPLICANT: Feng, Junli  
; APPLICANT: Funk, Walter  
; APPLICANT: Greider, Carol  
; APPLICANT: Marhuenda, Maria Antonia Blasco  
; TITLE OF INVENTION: RNA COMPONENT OF TELOMERASE  
; NUMBER OF SEQUENCES: 45  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Hamilton, Brook, Smith & Reynolds, P.C.  
; STREET: Two Militia Drive

; CITY: Lexington  
; STATE: MA  
; COUNTRY: US  
; ZIP: 02173  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/485,778  
; FILING DATE: 07-JE-1995  
; CLASSIFICATION: 435  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/387,524  
; FILING DATE: 13-FEB-1995  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/330,123  
; FILING DATE: 27-OCT-1994  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/272,102  
; FILING DATE: 07-JUL-1994  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Granahan, Patricia  
; REGISTRATION NUMBER: 32,227  
; REFERENCE/DOCKET NUMBER: CSHL94-05A4  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: 617-861-6240  
; TELEFAX: 617-861-9540  
; INFORMATION FOR SEQ ID NO: 7:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 22 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
US-08-485-778-7

Query Match 4.9%; Score 22; DB 1; Length 22;  
Best Local Similarity 100.0%; Pred. No. 66;  
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 46 CTAACCCCTAACTGAGAGGGCG 67  
Db 22 CTAACCCCTAACTGAGAGGGCG 1

## RESULT 94

US-08-485-778-8/c  
; Sequence 8, Application US/08485778  
; Patent No. 5876979  
; GENERAL INFORMATION:  
; APPLICANT: Andrews, William H.  
; APPLICANT: Avilion, Ariel Athena  
; APPLICANT: Feng, Junli  
; APPLICANT: Funk, Walter  
; APPLICANT: Greider, Carol  
; APPLICANT: Marhuenda, Maria Antonia Blasco  
; APPLICANT: Villeponteau, Bryant  
; TITLE OF INVENTION: RNA COMPONENT OF TELOMERASE  
; NUMBER OF SEQUENCES: 45  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Hamilton, Brook, Smith & Reynolds, P.C.  
; STREET: Two Militia Drive  
; CITY: Lexington  
; STATE: MA  
; COUNTRY: US  
; ZIP: 02173  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:

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; APPLICATION NUMBER: US/08/485,778
; FILING DATE: 07-JE-1995
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/387,524
; FILING DATE: 13-FEB-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/330,123
; FILING DATE: 27-OCT-1994
; APPLICATION DATA:
; APPLICATION NUMBER: US 08/272,102
; FILING DATE: 07-JUL-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: Granahan, Patricia
; REGISTRATION NUMBER: 32,227
; REFERENCE/DOCKET NUMBER: CSHL94-05A4
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617-861-6240
; TELEFAX: 617-861-9540
; INFORMATION FOR SEQ ID NO: 8:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 22 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; US-08-485-778-8

Query Match          4.9%  Score 22;  DB 1;  Length 22;
Best Local Similarity 100.0%; Pred. No. 66;
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 54 AACTGAGAAGCGCTAGCGCC 75
Db 22 AACTGAGAAGCGCTAGCGCC 1

RESULT 95
US-08-472-802C-37/c
; Sequence 37, Application US/08472802C
; Patent No. 5958680
; GENERAL INFORMATION:
; APPLICANT: Villeponteau, Bryant
; APPLICANT: Feng, Junli
; APPLICANT: Andrews, William H.
; TITLE OF INVENTION: Mammalian Telomerase
; NUMBER OF SEQUENCES: 44
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US 08/472,802C
; FILING DATE: 07-JUN-1995
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/272,102
; FILING DATE: 07-JUL-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/330,123
; FILING DATE: 27-OCT-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: Smith, William M.
; REGISTRATION NUMBER: 30,223
; REFERENCE/DOCKET NUMBER: 15389-000820
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 42:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 22 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: RNA
; US-08-472-802C-42

Query Match          4.9%  Score 22;  DB 1;  Length 22;
Best Local Similarity 100.0%; Pred. No. 66;
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 46 CTAACCCCTAACTGAGAGGCG 67
```

```
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 37:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 22 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
; US-08-472-802C-37

Query Match          4.9%  Score 22;  DB 1;  Length 22;
Best Local Similarity 100.0%; Pred. No. 66;
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 183 CTGCTGGCGCGTTGCGCCCTCC 204
Db 22 CTGCTGGCGCGTTGCGCCCTCC 1

RESULT 96
US-08-472-802C-42/c
; Sequence 42, Application US/08472802C
; Patent No. 5958680
; GENERAL INFORMATION:
; APPLICANT: Villeponteau, Bryant
; APPLICANT: Feng, Junli
; APPLICANT: Andrews, William H.
; TITLE OF INVENTION: Mammalian Telomerase
; NUMBER OF SEQUENCES: 44
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US 08/472,802C
; FILING DATE: 07-JUN-1995
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/272,102
; FILING DATE: 07-JUL-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/330,123
; FILING DATE: 27-OCT-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: Smith, William M.
; REGISTRATION NUMBER: 30,223
; REFERENCE/DOCKET NUMBER: 15389-000820
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 42:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 22 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: RNA
; US-08-472-802C-42

Query Match          4.9%  Score 22;  DB 1;  Length 22;
Best Local Similarity 100.0%; Pred. No. 66;
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

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Db      22 CTAACCCCTAAGAGAGGGCG 1
|||||
TITLE OF INVENTION: RNA Component of Telomerase
NUMBER OF SEQUENCES: 47
CORRESPONDENCE ADDRESS:
ADDRESSEE: Hamilton, Brook, Smith & Reynolds, P.C.
STREET: Two Militia Drive
CITY: Lexington
STATE: MA
COUNTRY: US
ZIP: 02173
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
TITLE OF INVENTION: Mammalian Telomerase
NUMBER OF SEQUENCES: 44
CORRESPONDENCE ADDRESS:
ADDRESSEE: Townsend and Townsend and Crew LLP
STREET: Two Embarcadero Center, Eighth Floor
CITY: San Francisco
STATE: California
COUNTRY: USA
ZIP: 94111-3834
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/472,802C
FILING DATE: 07-JUN-1995
CLASSIFICATION: 514
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/272,102
FILING DATE: 07-JUL-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/330,123
FILING DATE: 27-OCT-1994
ATTORNEY/AGENT INFORMATION:
NAME: Smith, William H.
REGISTRATION NUMBER: 30,223
REFERENCE/DOCKET NUMBER: 15389-000820
TELEPHONE: (415) 576-0300
TELEFAX: (415) 576-0300
INFORMATION FOR SEQ ID NO: 43:
SEQUENCE CHARACTERISTICS:
LENGTH: 22 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: RNA
US-08-472-802C-43

Query Match 4.9%; Score 22; DB 1; Length 22;
Best Local Similarity 100.0%; Pred. No. 66;
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      54 AACTGAGAGGGCGTAGGGGCC 75
|||||
Db      22 AACTGAGAGGGCGTAGGGGCC 1
|||||
RESULT 98
US-08-520-550A-7/c
; Sequence 7, Application US/08520550A
; Patent No. 6013468
; GENERAL INFORMATION:
; APPLICANT: Andrews, William H.
; APPLICANT: Avilion, Ariel A.
; APPLICANT: Feng, Junli
; APPLICANT: Greider, Carol
; APPLICANT: Marhuenda, Maria A. B.
; APPLICANT: Villeponteau, Bryant
; TITLE OF INVENTION: RNA Component of Telomerase
; NUMBER OF SEQUENCES: 47
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Hamilton, Brook, Smith & Reynolds, P.C.
; STREET: Two Militia Drive
; CITY: Lexington
; STATE: MA
; COUNTRY: US
; ZIP: 02173
; COMPUTER READABLE FORM:

Db      22 CTAACCCCTAAGAGAGGGCG 1
|||||
TITLE OF INVENTION: RNA Component of Telomerase
NUMBER OF SEQUENCES: 47
CORRESPONDENCE ADDRESS:
ADDRESSEE: Hamilton, Brook, Smith & Reynolds, P.C.
STREET: Two Militia Drive
CITY: Lexington
STATE: MA
COUNTRY: US
ZIP: 02173
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/520,550A
FILING DATE: 29-AUG-1995
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/387,524
FILING DATE: 13-FEB-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/330,123
FILING DATE: 27-OCT-1994
ATTORNEY/AGENT INFORMATION:
NAME: Granahan, Patricia
REGISTRATION NUMBER: 32,227
REFERENCE/DOCKET NUMBER: CSHL94-05A3B
TELEPHONE: 617-861-6240
TELEFAX: 617-861-9540
INFORMATION FOR SEQ ID NO: 7:
SEQUENCE CHARACTERISTICS:
LENGTH: 22 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
US-08-520-550A-7

Query Match 4.9%; Score 22; DB 1; Length 22;
Best Local Similarity 100.0%; Pred. No. 66;
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      46 CTAACCCCTAAGAGAGGGCG 67
|||||
Db      22 CTAACCCCTAAGAGAGGGCG 1
|||||
RESULT 99
US-08-520-550A-8/c
; Sequence 8, Application US/08520550A
; Patent No. 6013468
; GENERAL INFORMATION:
; APPLICANT: Andrews, William H.
; APPLICANT: Avilion, Ariel A.
; APPLICANT: Feng, Junli
; APPLICANT: Greider, Carol
; APPLICANT: Marhuenda, Maria A. B.
; APPLICANT: Villeponteau, Bryant
; TITLE OF INVENTION: RNA Component of Telomerase
; NUMBER OF SEQUENCES: 47
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Hamilton, Brook, Smith & Reynolds, P.C.
; STREET: Two Militia Drive
; CITY: Lexington
; STATE: MA
; COUNTRY: US
; ZIP: 02173
; COMPUTER READABLE FORM:
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MEDIUM TYPE: Floppy disk  
 COMPUTER: IBM PC compatible  
 OPERATING SYSTEM: PC-DOS/MS-DOS  
 SOFTWARE: Patent In Release #1.0, Version #1.30  
 CURRENT APPLICATION DATA:  
 APPLICATION NUMBER: US/08/520,550A  
 FILING DATE: 29-AUG-1995  
 CLASSIFICATION: 435  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: US 08/387,524  
 FILING DATE: 13-FEB-1995  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: US 08/330,123  
 FILING DATE: 27-OCT-1994  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: US 08/272,102  
 FILING DATE: 07-JUL-1994  
 ATTORNEY/AGENT INFORMATION:  
 NAME: Granahan, Patricia  
 REGISTRATION NUMBER: 32,227  
 REFERENCE/DOCKET NUMBER: CSHL94-05A3B  
 TELECOMMUNICATION INFORMATION:  
 TELEPHONE: 617-861-6240  
 TELEFAX: 617-861-9540  
 INFORMATION FOR SEQ ID NO: 8:  
 SEQUENCE CHARACTERISTICS:  
 LENGTH: 22 base pairs  
 TYPE: nucleic acid  
 STRANDEDNESS: single  
 TOPOLOGY: linear  
 US-08-520-550A-8

Query Match 4.9%; Score 22; DB 1; Length 22;  
 Best Local Similarity 100.0%; Pred. No. 66;  
 Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 54 AACTGAGAGGCGTAGGCGCC 75  
 Db 22 AACTGAGAGGCGTAGGCGCC 1

RESULT 100  
 US-08-998-443-27/c  
 ; Sequence 27, Application US/08998443  
 ; Patent No. 6054575  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Villeponteau, Bryant  
 ; APPLICANT: Feng, Junli  
 ; APPLICANT: Funk, Walter  
 ; APPLICANT: Andrews, William H.  
 ; TITLE OF INVENTION: Mammalian Telomerase  
 ; NUMBER OF SEQUENCES: 30  
 ; CORRESPONDENCE ADDRESS:  
 ; ADDRESSEE: Townsend and Townsend and Crew LLP  
 ; STREET: Two Embarcadero Center, Eighth Floor  
 ; CITY: San Francisco  
 ; STATE: California  
 ; COUNTRY: USA  
 ; ZIP: 94111-3834  
 ; COMPUTER READABLE FORM:  
 ; MEDIUM TYPE: Floppy disk  
 ; COMPUTER: IBM PC compatible  
 ; OPERATING SYSTEM: PC-DOS/MS-DOS  
 ; SOFTWARE: Patent In Release #1.0, Version #1.30  
 ; CURRENT APPLICATION DATA:  
 ; APPLICATION NUMBER: US/08/998,443  
 ; FILING DATE:  
 ; CLASSIFICATION:  
 ; PRIOR APPLICATION DATA:  
 ; APPLICATION NUMBER: US/08/660,678  
 ; FILING DATE: 05-JUN-1996  
 ; APPLICATION NUMBER: US 08/330,123  
 ; FILING DATE: 27-OCT-1994  
 ; PRIOR APPLICATION DATA:  
 ; APPLICATION NUMBER: US 08/272,102  
 ; FILING DATE: 07-JUL-1994  
 ; ATTORNEY/AGENT INFORMATION:  
 ; NAME: Storella, John R.  
 ; REGISTRATION NUMBER: 32,944  
 ; REFERENCE/DOCKET NUMBER: 015389-000811US  
 ; TELECOMMUNICATION INFORMATION:  
 ; TELEPHONE: (415) 576-0200  
 ; TELEFAX: (415) 576-0300  
 ; INFORMATION FOR SEQ ID NO: 28:  
 ; SEQUENCE CHARACTERISTICS:  
 ; LENGTH: 22 base pairs

QY 46 CTAACTTAAGTGAAGGCG 67  
 Db 22 CTAACTTAAGTGAAGGCG 1

RESULT 101  
 US-08-998-443-28/c  
 ; Sequence 28, Application US/08998443  
 ; Patent No. 6054575  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Villeponteau, Bryant  
 ; APPLICANT: Feng, Junli  
 ; APPLICANT: Funk, Walter  
 ; APPLICANT: Andrews, William H.  
 ; TITLE OF INVENTION: Mammalian Telomerase  
 ; NUMBER OF SEQUENCES: 30  
 ; CORRESPONDENCE ADDRESS:  
 ; ADDRESSEE: Townsend and Townsend and Crew LLP  
 ; STREET: Two Embarcadero Center, Eighth Floor  
 ; CITY: San Francisco  
 ; STATE: California  
 ; COUNTRY: USA  
 ; ZIP: 94111-3834  
 ; COMPUTER READABLE FORM:  
 ; MEDIUM TYPE: Floppy disk  
 ; COMPUTER: IBM PC compatible  
 ; OPERATING SYSTEM: PC-DOS/MS-DOS  
 ; SOFTWARE: Patent In Release #1.0, Version #1.30  
 ; CURRENT APPLICATION DATA:  
 ; APPLICATION NUMBER: US/08/998,443  
 ; FILING DATE:  
 ; CLASSIFICATION:  
 ; PRIOR APPLICATION DATA:  
 ; APPLICATION NUMBER: US/08/660,678  
 ; FILING DATE: 05-JUN-1996  
 ; APPLICATION NUMBER: US 08/330,123  
 ; FILING DATE: 27-OCT-1994  
 ; PRIOR APPLICATION DATA:  
 ; APPLICATION NUMBER: US 08/272,102  
 ; FILING DATE: 07-JUL-1994  
 ; ATTORNEY/AGENT INFORMATION:  
 ; NAME: Storella, John R.  
 ; REGISTRATION NUMBER: 32,944  
 ; REFERENCE/DOCKET NUMBER: 015389-000811US  
 ; TELECOMMUNICATION INFORMATION:  
 ; TELEPHONE: (415) 576-0200  
 ; TELEFAX: (415) 576-0300  
 ; INFORMATION FOR SEQ ID NO: 28:  
 ; SEQUENCE CHARACTERISTICS:  
 ; LENGTH: 22 base pairs

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; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
US-08-998-443-28

Query Match          4.9%; Score 22; DB 1; Length 22;
Best Local Similarity 100.0%; Pred. No. 66;
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 54 AACTGAGAAGCGCTAGGCGCC 75
Db 22 AACTGAGAAGCGCTAGGCGCC 1

RESULT 102
US-09-580-517-5/c
; Sequence 5, Application US/09580517
; Patent No. 6320039
; GENERAL INFORMATION:
; APPLICANT: VILLEPONTEAU, Bryant
; FENG, Junli
; FUNK, Walter
; ANDREWS, William H.
; TITLE OF INVENTION: HUMAN TELOMERASE
; NUMBER OF SEQUENCES: 25
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend Khourie and Crew
; STREET: 379 Lytton Avenue
; CITY: Palo Alto
; STATE: California
; COUNTRY: US
; ZIP: 94301
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION NUMBER: US/09/580,517
; FILING DATE: 25-May-2000
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/330,123
; FILING DATE: <Unknown>
; ATTORNEY/AGENT INFORMATION:
; NAME: Smith, William M
; REGISTRATION NUMBER: 30,223
; REFERENCE/DOCKET NUMBER: 15389-000810
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 326-2400
; TELEFAX: (415) 326-2422
; INFORMATION FOR SEQ ID NO: 6:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 22 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: RNA
; SEQUENCE DESCRIPTION: SEQ ID NO: 6:
US-09-580-517-6

Query Match          4.9%; Score 22; DB 1; Length 22;
Best Local Similarity 100.0%; Pred. No. 66;
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 54 AACTGAGAAGCGCTAGGCGCC 75
Db 22 AACTGAGAAGCGCTAGGCGCC 1

RESULT 104
US-09-717-828B-2/c
; Sequence 2, Application US/09717828B
; Patent No. 6517834
; GENERAL INFORMATION:
; APPLICANT: Weinrich, Scott L
; APPLICANT: Atkinson III, Edward M
; APPLICANT: Lichtsteiner, Serge P
; APPLICANT: Vasserot, Allain P
; APPLICANT: Pruzan, Ronald A
; TITLE OF INVENTION: A Method for Purifying Telomerase
; FILE REFERENCE: PurifiedTelomerase011base
; CURRENT APPLICATION NUMBER: US/09/717,828B
; CURRENT FILING DATE: 2000-11-20
; PRIOR APPLICATION NUMBER: 09/420,056
; PRIOR FILING DATE: 1999-10-18
; PRIOR APPLICATION NUMBER: 08/833,377
; PRIOR FILING DATE: 1997-04-04
; PRIOR APPLICATION NUMBER: 08/510,736
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; PRIOR FILING DATE: 1995-08-04
; NUMBER OF SEQ ID NOS: 11
; SOFTWARE: PatentIn Ver. 2.1 edited
; SEQ ID NO 2
; LENGTH: 22
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (1)
; OTHER INFORMATION: Biotin 5'-terminal
; OTHER INFORMATION: Description of Artificial Sequence: Affinity Agent
US-09-717-828B-2

Query Match          4.9%; Score 22; DB 1; Length 22;
Best Local Similarity 100.0%; Pred. No. 66;
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 46 CTAACCCCTAACTGAGAGGGCG 67
Db 22 CTAACCCCTAACTGAGAGGGCG 1

RESULT 105
US-09-717-829A-2/c
; Sequence 2, Application US/09717829A
; Patent No. 6545133
; GENERAL INFORMATION:
; APPLICANT: Weinrich, Scott L
; APPLICANT: Atkinson III, Edward M
; APPLICANT: Lichtsneider, Serge P
; APPLICANT: Vasserot, Alain P
; APPLICANT: Pruzan, Ronald A
; TITLE OF INVENTION: A Method for Purifying Telomerase
; FILE REFERENCE: Purifiedtelomerase01base
; CURRENT APPLICATION NUMBER: US/09717,829A
; CURRENT FILING DATE: 2000-11-20
; PRIOR APPLICATION NUMBER: 09/420,056
; PRIOR FILING DATE: 1999-10-18
; PRIOR APPLICATION NUMBER: 08/833,377
; PRIOR FILING DATE: 1997-04-04
; PRIOR APPLICATION NUMBER: 08/510,736
; PRIOR FILING DATE: 1995-08-04
; NUMBER OF SEQ ID NOS: 11
; SOFTWARE: PatentIn Ver. 2.1 edited
; SEQ ID NO 2
; LENGTH: 22
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (1)
; OTHER INFORMATION: Biotin 5'-terminal
; OTHER INFORMATION: Description of Artificial Sequence: Affinity Agent
US-09-717-829A-2

Query Match          4.9%; Score 22; DB 1; Length 22;
Best Local Similarity 100.0%; Pred. No. 66;
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 46 CTAACCCCTAACTGAGAGGGCG 67
Db 22 CTAACCCCTAACTGAGAGGGCG 1

RESULT 106
US-09-057-351-41/c
; Sequence 41, Application US/09057351
; Patent No. 6548298
; GENERAL INFORMATION:
; APPLICANT: Villeponteau, Bryant
; APPLICANT: Funk, Junli
; APPLICANT: Funk, Walter
; TITLE OF INVENTION: Mammalian Telomerase
; NUMBER OF SEQUENCES: 42
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
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```
; APPLICANT: Andrews, William H.
; TITLE OF INVENTION: Mammalian Telomerase
; NUMBER OF SEQUENCES: 42
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/057,351
; FILING DATE: 08-APR-1994
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/272,102
; FILING DATE: 07-JUL-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/330,123
; FILING DATE: 27-OCT-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/472,802
; FILING DATE: 07-JUN-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-000821US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 41:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 22 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: RNA
US-09-057-351-41

Query Match          4.9%; Score 22; DB 1; Length 22;
Best Local Similarity 100.0%; Pred. No. 66;
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 46 CTAACCCCTAACTGAGAGGGCG 67
Db 22 CTAACCCCTAACTGAGAGGGCG 1

RESULT 107
US-09-057-351-42/c
; Sequence 42, Application US/09057351
; Patent No. 6548298
; GENERAL INFORMATION:
; APPLICANT: Villeponteau, Bryant
; APPLICANT: Funk, Junli
; APPLICANT: Funk, Walter
; APPLICANT: Andrews, William H.
; TITLE OF INVENTION: Mammalian Telomerase
; NUMBER OF SEQUENCES: 42
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
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COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/09/057,351  
FILING DATE: 08-APR-1994  
CLASSIFICATION: 435  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/272,102  
FILING DATE: 07-JUL-1994  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/330,123  
FILING DATE: 27-OCT-1994  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/472,802  
FILING DATE: 07-JUN-1995  
ATTORNEY/AGENT INFORMATION:  
NAME: Storella, John R.  
REGISTRATION NUMBER: 32,944  
REFERENCE/DOCKET NUMBER: 015389-000821US  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (415) 576-0200  
TELEFAX: (415) 576-0300  
INFORMATION FOR SEQ ID NO: 42:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 22 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: RNA  
US-09-057-351-42

Query Match 4.9%; Score 22; DB 1; Length 22;  
Best Local Similarity 100.0%; Pred. No. 66;  
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 54 AACTGAGAGGGCGTAGGCGCC 75  
Db 22 AACTGAGAGGGCGTAGGCGCC 1

RESULT 108  
US-10-330-872-2/c  
Sequence 2, Application US/10330872  
Patent No. 6787133  
GENERAL INFORMATION:  
APPLICANT: Geron Corporation  
APPLICANT: Weinrich, Scott  
APPLICANT: Atkinson III, Edward  
APPLICANT: Lichtsteiner, Serge  
APPLICANT: Vasserot, Alain  
APPLICANT: Pruzan, Ronald  
TITLE OF INVENTION: Using Purified Telomerase to Identify Telomerase Activators and  
FILE REFERENCE: 011/006C  
CURRENT APPLICATION NUMBER: US/10/330,872  
CURRENT FILING DATE: 2002-12-24  
PRIOR APPLICATION NUMBER: 08/510,736  
PRIOR FILING DATE: 1995-08-04  
PRIOR APPLICATION NUMBER: 08/833,377  
PRIOR FILING DATE: 1997-04-04  
PRIOR APPLICATION NUMBER: 09/420,056  
PRIOR FILING DATE: 1999-10-18  
PRIOR APPLICATION NUMBER: 09/717,828  
PRIOR FILING DATE: 2000-11-20  
NUMBER OF SEQ ID NOS: 11  
SOFTWARE: PatentIn version 3.1  
SEQ ID NO 2  
LENGTH: 22  
TYPE: DNA  
ORGANISM: Homo sapiens  
US-10-330-872-2

Query Match 4.9%; Score 22; DB 1; Length 22;  
Best Local Similarity 100.0%; Pred. No. 66;  
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 46 CTAACCCCTAACTGAGAGGGCG 67  
Db 22 CTAACCCCTAACTGAGAGGGCG 1

RESULT 109  
US-08-330-123A-25/c  
Sequence 25, Application US/08330123A  
Patent No. 5583016  
GENERAL INFORMATION:  
APPLICANT: VILLEPONTEAU, Bryant  
APPLICANT: FENG, Junli  
APPLICANT: FUNK, Walter  
TITLE OF INVENTION: HUMAN TELOMERASE  
NUMBER OF SEQUENCES: 25  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Townsend and Townsend Khourie and Crew  
STREET: 379 Lytton Avenue  
CITY: Palo Alto  
STATE: California  
COUNTRY: US  
ZIP: 94301  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/330,123A  
FILING DATE: 27-OCT-1994  
CLASSIFICATION: 435  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/272,102  
FILING DATE: 07-JUL-1994  
ATTORNEY/AGENT INFORMATION:  
NAME: Smith, William M  
REGISTRATION NUMBER: 30,223  
REFERENCE/DOCKET NUMBER: 15389-000810  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (415) 326-2400  
TELEFAX: (415) 326-2422  
INFORMATION FOR SEQ ID NO: 25:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 21 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: DNA  
US-08-330-123A-25

Query Match 4.7%; Score 21; DB 1; Length 21;  
Best Local Similarity 100.0%; Pred. No. 74;  
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 184 TGCTGGCCCGTTGCGCCCTCC 204  
Db 21 TGCTGGCCCGTTGCGCCCTCC 1

RESULT 110  
US-08-482-115B-25/c  
Sequence 25, Application US/08482115B  
Patent No. 5776679  
GENERAL INFORMATION:  
APPLICANT: Villeponteau, Bryant  
APPLICANT: FENG, Junli  
APPLICANT: FUNK, Walter  
APPLICANT: Andrews, William H.

;; TITLE OF INVENTION: Assays for the RNA Component of Human  
;; TITLE OF INVENTION: Telomerase  
;; NUMBER OF SEQUENCES: 40  
;; CORRESPONDENCE ADDRESS:  
;; ADDRESSEE: Townsend and Townsend and Crew LLP  
;; STREET: Two Embarcadero Center, Eighth Floor  
;; CITY: San Francisco  
;; STATE: California  
;; COUNTRY: USA  
;; ZIP: 94111-3834  
;; COMPUTER READABLE FORM:  
;; MEDIUM TYPE: Floppy disk  
;; COMPUTER: IBM PC compatible  
;; OPERATING SYSTEM: PC-DOS/MS-DOS  
;; SOFTWARE: Patentin Release #1.0, Version #1.30  
;; CURRENT APPLICATION DATA:  
;; APPLICATION NUMBER: US/08/482,115B  
;; FILING DATE: 07-JUN-1995  
;; CLASSIFICATION: 435  
;; PRIOR APPLICATION DATA:  
;; APPLICATION NUMBER: US 08/272,102  
;; FILING DATE: 07-JUL-1994  
;; PRIOR APPLICATION DATA:  
;; APPLICATION NUMBER: US 08/330,123  
;; FILING DATE: 27-OCT-1994  
;; NAME: Storella, John R.  
;; REGISTRATION NUMBER: 32,944  
;; REFERENCE/DOCKET NUMBER: 015389-000830US  
;; TELECOMMUNICATION INFORMATION:  
;; TELEPHONE: (415) 576-0300  
;; TELEFAX: (415) 576-0300  
;; INFORMATION FOR SEQ ID NO: 25:  
;; SEQUENCE CHARACTERISTICS:  
;; LENGTH: 21 base pairs  
;; TYPE: nucleic acid  
;; STRANDEDNESS: single  
;; TOPOLOGY: linear  
;; MOLECULE TYPE: DNA  
US-08-482-115B-25

Query Match 4.7%; Score 21; DB 1; Length 21;  
Best Local Similarity 100.0%; Pred. No. 74;  
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 184 TGCTGGCCCGTTCGCCCTCC 204  
Db 21 TGCTGGCCCGTTCGCCCTCC 1

RESULT 111  
US-08-660-678A-25/c  
; Sequence 25, Application US/08660678A  
; Patent No. 5837857  
; GENERAL INFORMATION:  
; APPLICANT: Villeponteau, Bryant  
; APPLICANT: Feng, Junli  
; APPLICANT: Funk, Walter  
; APPLICANT: Andrews, William H.  
; TITLE OF INVENTION: Mammalian Telomerase  
; NUMBER OF SEQUENCES: 30  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Townsend and Townsend and Crew LLP  
; STREET: Two Embarcadero Center, Eighth Floor  
; CITY: San Francisco  
; STATE: California  
; COUNTRY: USA  
; ZIP: 94111-3834  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patentin Release #1.0, Version #1.30

;; CURRENT APPLICATION DATA:  
;; APPLICATION NUMBER: US/08/660,678A  
;; FILING DATE: 05-JUN-1996  
;; CLASSIFICATION: 435  
;; PRIOR APPLICATION DATA:  
;; APPLICATION NUMBER: US 08/330,123  
;; FILING DATE: 27-OCT-1994  
;; PRIOR APPLICATION DATA:  
;; APPLICATION NUMBER: US 08/272,102  
;; FILING DATE: 07-JUL-1994  
;; ATTORNEY/AGENT INFORMATION:  
;; NAME: Storella, John R.  
;; REGISTRATION NUMBER: 32,944  
;; REFERENCE/DOCKET NUMBER: 015389-000811US  
;; TELECOMMUNICATION INFORMATION:  
;; TELEPHONE: (415) 576-0200  
;; TELEFAX: (415) 576-0300  
;; INFORMATION FOR SEQ ID NO: 25:  
;; SEQUENCE CHARACTERISTICS:  
;; LENGTH: 21 base pairs  
;; TYPE: nucleic acid  
;; STRANDEDNESS: single  
;; TOPOLOGY: linear  
;; MOLECULE TYPE: DNA  
US-08-660-678A-25

Query Match 4.7%; Score 21; DB 1; Length 21;  
Best Local Similarity 100.0%; Pred. No. 74;  
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 184 TGCTGGCCCGTTCGCCCTCC 204  
Db 21 TGCTGGCCCGTTCGCCCTCC 1

RESULT 112  
US-08-485-778-33/c  
; Sequence 33, Application US/08485778  
; Patent No. 5876979  
; GENERAL INFORMATION:  
; APPLICANT: Andrews, William H.  
; APPLICANT: Avillion, Ariel Athena  
; APPLICANT: Feng, Junli  
; APPLICANT: Funk, Walter  
; APPLICANT: Greider, Carol  
; APPLICANT: Marhuenda, Maria Antonia Blasco  
; APPLICANT: Villeponteau, Bryant  
; TITLE OF INVENTION: RNA COMPONENT OF TELOMERASE  
; NUMBER OF SEQUENCES: 45  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Hamilton, Brook, Smith & Reynolds, P.C.  
; STREET: Two Militia Drive  
; CITY: Lexington  
; STATE: MA  
; COUNTRY: US  
; ZIP: 02173  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patentin Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/485,778  
; FILING DATE: 07-JE-1995  
; CLASSIFICATION: 435  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/387,524  
; FILING DATE: 13-FEB-1995  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/330,123  
; FILING DATE: 27-OCT-1994  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/272,102

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; FILING DATE: 07-JUL-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: Granahan, Patricia
; REGISTRATION NUMBER: 32,227
; REFERENCE/DOCKET NUMBER: CSHL94-05A4
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617-861-6240
; TELEFAX: 617-861-9540
; INFORMATION FOR SEQ ID NO: 33:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 21 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
;
US-08-485-778-33

Query Match
Best Local Similarity 4.7%; Score 21; DB 1; Length 21;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 184 TGCTGGCCCGTTGCGCCCTCC 204
Db 21 TGCTGGCCCGTTGCGCCCTCC 1

RESULT 113
US-08-472-802C-26/c
; Sequence 26, Application US/08472802C
; Patent No. 5958680
; GENERAL INFORMATION:
; APPLICANT: Villeponteau, Bryant
; APPLICANT: Feng, Junli
; APPLICANT: Andrews, William H.
; TITLE OF INVENTION: Mammalian Telomerase
; NUMBER OF SEQUENCES: 44
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/472,802C
; FILING DATE: 07-JUN-1995
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/272,102
; FILING DATE: 07-JUL-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/330,123
; FILING DATE: 27-OCT-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: Smith, William M.
; REGISTRATION NUMBER: 30,223
; REFERENCE/DOCKET NUMBER: 15389-000820
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 26:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 21 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
;
US-08-472-802C-26
```

```

Query Match
Best Local Similarity 4.7%; Score 21; DB 1; Length 21;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 184 TGCTGGCCCGTTGCGCCCTCC 204
Db 21 TGCTGGCCCGTTGCGCCCTCC 1

RESULT 114
US-08-520-550A-33/c
; Sequence 33, Application US/08520550A
; Patent No. 6013468
; GENERAL INFORMATION:
; APPLICANT: Andrews, William H.
; APPLICANT: Avilion, Ariel A.
; APPLICANT: Feng, Junli
; APPLICANT: Funk, Walter
; APPLICANT: Greider, Carol
; APPLICANT: Marhuenda, Maria A. B.
; APPLICANT: Villeponteau, Bryant
; TITLE OF INVENTION: RNA Component of Telomerase
; NUMBER OF SEQUENCES: 47
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Hamilton, Brook, Smith & Reynolds, P.C.
; STREET: Two Militia Drive
; CITY: Lexington
; STATE: MA
; COUNTRY: US
; ZIP: 02173
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/520,550A
; FILING DATE: 29-AUG-1995
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/387,524
; FILING DATE: 13-FEB-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/330,123
; FILING DATE: 27-OCT-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/272,102
; FILING DATE: 07-JUL-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: Granahan, Patricia
; REGISTRATION NUMBER: 32,227
; REFERENCE/DOCKET NUMBER: CSHL94-05A3B
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617-861-6240
; TELEFAX: 617-861-9540
; INFORMATION FOR SEQ ID NO: 33:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 21 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
;
US-08-520-550A-33

Query Match
Best Local Similarity 4.7%; Score 21; DB 1; Length 21;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 184 TGCTGGCCCGTTGCGCCCTCC 204
Db 21 TGCTGGCCCGTTGCGCCCTCC 1
```

RESULT 115

US-08-998-443-25/c  
; Sequence 25, Application US/08998443  
; Patent No. 6054575  
; GENERAL INFORMATION:  
; APPLICANT: Villeponteau, Bryant  
; APPLICANT: Feng, Junli  
; APPLICANT: Funk, Walter  
; APPLICANT: Andrews, William H.  
; TITLE OF INVENTION: Mammalian Telomerase  
; NUMBER OF SEQUENCES: 30  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Townsend and Townsend and Crew LLP  
; STREET: Two Embarcadero Center, Eighth Floor  
; CITY: San Francisco  
; STATE: California  
; COUNTRY: USA  
; ZIP: 94111-3834  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/998,443  
; FILING DATE: 27-OCT-1994  
; CLASSIFICATION:  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US/08/660,678  
; FILING DATE: 05-JUN-1996  
; APPLICATION NUMBER: US/08/330,123  
; FILING DATE: 27-OCT-1994  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US/08/272,102  
; FILING DATE: 07-JUL-1994  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Storella, John R.  
; REGISTRATION NUMBER: 32,944  
; REFERENCE/DOCKET NUMBER: 015389-000811US  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (415) 576-0200  
; TELEFAX: (415) 576-0300  
; INFORMATION FOR SEQ ID NO: 25:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 21 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: DNA  
; US-08-998-443-25

Query Match 4.7%; Score 21; DB 1; Length 21;  
Best Local Similarity 100.0%; Pred. No. 74;  
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 184 TGCTGGCCCGTTCGCCCTCC 204  
|||||  
Db 21 TGCTGGCCCGTTCGCCCTCC 1

RESULT 116  
US-08-998-443-25/c  
; Sequence 25, Application US/09060523  
; Patent No. 6258535  
; GENERAL INFORMATION:  
; APPLICANT: Villeponteau, Bryant  
; APPLICANT: Feng, Junli  
; APPLICANT: Funk, Walter  
; APPLICANT: Andrews, William H.  
; TITLE OF INVENTION: Mammalian Telomerase  
; NUMBER OF SEQUENCES: 25  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Townsend and Townsend and Crew LLP  
; STREET: Two Embarcadero Center, Eighth Floor

; CITY: San Francisco  
; STATE: California  
; COUNTRY: USA  
; ZIP: 94111-3834  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/09/060,523  
; FILING DATE: 14-APR-1998  
; CLASSIFICATION: 536  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US/08/660,678  
; FILING DATE: 05-JUN-1996  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US/08/330,123  
; FILING DATE: 27-OCT-1994  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US/08/272,102  
; FILING DATE: 07-JUL-1994  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Storella, John R.  
; REGISTRATION NUMBER: 32,944  
; REFERENCE/DOCKET NUMBER: 015389-000813US  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (415) 576-0200  
; TELEFAX: (415) 576-0300  
; INFORMATION FOR SEQ ID NO: 25:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 21 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: DNA  
; US-09-060-523-25

Query Match 4.7%; Score 21; DB 1; Length 21;  
Best Local Similarity 100.0%; Pred. No. 74;  
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 184 TGCTGGCCCGTTCGCCCTCC 204  
|||||  
Db 21 TGCTGGCCCGTTCGCCCTCC 1

RESULT 117  
US-09-580-517-25/c  
; Sequence 25, Application US/09580517  
; Patent No. 6320039  
; GENERAL INFORMATION:  
; APPLICANT: VILLEPONTEAU, Bryant  
; FENG, Junli  
; FUNK, Walter  
; ANDREWS, William H.  
; TITLE OF INVENTION: HUMAN TELOMERASE  
; NUMBER OF SEQUENCES: 25  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Townsend and Townsend Khourie and Crew  
; STREET: 379 Lytton Avenue  
; CITY: Palo Alto  
; STATE: California  
; COUNTRY: US  
; ZIP: 94301  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.25  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/09/580,517  
; FILING DATE: 25-May-2000

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;
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/330,123
; FILING DATE: <Unknown>
; ATTORNEY/AGENT INFORMATION:
; NAME: Smith, William M
; REGISTRATION NUMBER: 30,223
; REFERENCE/DOCKET NUMBER: 15389-000810
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 326-2400
; TELEFAX: (415) 326-2422
; INFORMATION FOR SEQ ID NO: 25:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 21 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
; SEQUENCE DESCRIPTION: SEQ ID NO: 25:
US-09-580-517-25

Query Match 4.7%; Score 21; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 74;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 184 TGCTGGCCCGTTGCCCCCTCC 204
DB 21 TGCTGGCCCGTTGCCCCCTCC 1

RESULT 118
US-09-057-351-25/c
; Sequence 25, Application US/09057351
; Patent No. 6548298
; GENERAL INFORMATION:
; APPLICANT: Villeponteau, Bryant
; APPLICANT: Feng, Junli
; APPLICANT: Funk, Walter
; APPLICANT: Andrews, William H.
; TITLE OF INVENTION: Mammalian Telomerase
; NUMBER OF SEQUENCES: 42
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/057,351
; FILING DATE: 08-APR-1994
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/272,102
; FILING DATE: 07-JUL-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/330,123
; FILING DATE: 27-OCT-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/472,802
; FILING DATE: 07-JUN-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-000821US
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
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; INFORMATION FOR SEQ ID NO: 25:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 21 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
; US-09-057-351-25

Query Match 4.7%; Score 21; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 74;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 184 TGCTGGCCCGTTGCCCCCTCC 204
DB 21 TGCTGGCCCGTTGCCCCCTCC 1

RESULT 119
US-08-833-377-3/c
; Sequence 3, Application US/08833377
; Patent No. 5988506
; GENERAL INFORMATION:
; APPLICANT: Weinrich, Scott L.
; APPLICANT: Atkinson III, Edward M.
; APPLICANT: Lichtsteiner, Serge P.
; APPLICANT: Vasserot, Alain P.
; APPLICANT: Pruzan, Ronald A.
; APPLICANT: Kealey, James T.
; TITLE OF INVENTION: Purified Telomerase
; NUMBER OF SEQUENCES: 15
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/833,377
; FILING DATE: 04-APR-1997
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/510,736
; FILING DATE: 04-AUG-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-001110US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 3:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 22 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
; FEATURE:
; NAME/KEY: modified_base
; LOCATION: 1
; OTHER INFORMATION: /mod_base= OTHER
; OTHER INFORMATION: /note= "N = 5' biotinylated cytidine"
; FEATURE:
; NAME/KEY: -
; LOCATION: 1..22
; OTHER INFORMATION: /note= "oligonucleotide P3"
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US-08-833-377-3

Query Match 4.7%; Score 21; DB 1; Length 22;  
Best Local Similarity 100.0%; Pred. No. 78;  
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 46 CTAACCCCTAACTGAGAGGC 66  
Db 22 CTAACCCCTAACTGAGAGGC 2

RESULT 120

US-08-330-123A-4/c  
; Sequence 4, Application US/08330123A  
; Patent No. 5583016  
; GENERAL INFORMATION:  
; APPLICANT: VILLEPONTEAU, Bryant  
; APPLICANT: FENG, Junli  
; APPLICANT: FUNK, Walter  
; APPLICANT: ANDREWS, William H.  
; TITLE OF INVENTION: HUMAN TELOMERASE  
; NUMBER OF SEQUENCES: 25  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Townsend and Townsend Khourie and Crew  
; STREET: 379 Lytton Avenue  
; CITY: Palo Alto  
; STATE: California  
; COUNTRY: US  
; ZIP: 94301

COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/330,123A  
FILING DATE: 27-OCT-1994  
CLASSIFICATION: 435

PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/272,102  
FILING DATE: 07-JUL-1994

ATTORNEY/AGENT INFORMATION:  
NAME: Smith, William M  
REGISTRATION NUMBER: 30,223  
REFERENCE/DOCKET NUMBER: 15389-000810  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (415) 326-2400  
TELEFAX: (415) 326-2422

INFORMATION FOR SEQ ID NO: 4:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 20 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: RNA  
US-08-330-123A-4

Query Match 4.4%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 83;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 41 TTTGTCTAACCTTAAGT 60  
Db 20 TTTGTCTAACCTTAAGT 1

RESULT 121

US-08-330-123A-7/c  
; Sequence 7, Application US/08330123A  
; Patent No. 5583016  
; GENERAL INFORMATION:  
; APPLICANT: VILLEPONTEAU, Bryant  
; APPLICANT: FENG, Junli

; APPLICANT: FUNK, Walter  
; APPLICANT: ANDREWS, William H.  
; TITLE OF INVENTION: HUMAN TELOMERASE  
; NUMBER OF SEQUENCES: 25  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Townsend and Townsend Khourie and Crew  
; STREET: 379 Lytton Avenue  
; CITY: Palo Alto  
; STATE: California  
; COUNTRY: US  
; ZIP: 94301

COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/330,123A  
FILING DATE: 27-OCT-1994  
CLASSIFICATION: 435

PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/272,102  
FILING DATE: 07-JUL-1994

ATTORNEY/AGENT INFORMATION:  
NAME: Smith, William M  
REGISTRATION NUMBER: 30,223  
REFERENCE/DOCKET NUMBER: 15389-000810  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (415) 326-2400  
TELEFAX: (415) 326-2422

INFORMATION FOR SEQ ID NO: 7:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 20 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: DNA  
US-08-330-123A-7

Query Match 4.4%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 83;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2 GGTTCGGAGGTGGCCTG 21  
Db 20 GGTTCGGAGGTGGCCTG 1

RESULT 122

US-08-482-115B-7/c  
; Sequence 7, Application US/08482115B  
; Patent No. 5776679  
; GENERAL INFORMATION:  
; APPLICANT: Villeponteau, Bryant  
; APPLICANT: Feng, Junli  
; APPLICANT: Funk, Walter  
; APPLICANT: ANDREWS, William H.  
; TITLE OF INVENTION: Assays for the RNA Component of Human  
; TITLE OF INVENTION: Telomerase  
; NUMBER OF SEQUENCES: 40  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Townsend and Townsend and Crew LLP  
; STREET: Two Embarcadero Center, Eighth Floor  
; CITY: San Francisco  
; STATE: California  
; COUNTRY: USA  
; ZIP: 94111-3834

COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:

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; APPLICATION NUMBER: US/08/482,115B
; FILING DATE: 07-JUN-1995
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/272,102
; FILING DATE: 07-JUL-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/330,123
; FILING DATE: 27-OCT-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-000830US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0300
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 7:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 20 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
; US-08-482-115B-7

Query Match          4.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 83;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      2 GGTTCGGAGGCTGGGCGCTG 21
Db      20 GGTTCGGAGGCTGGGCGCTG 1

RESULT 123
US-08-660-678A-7/c
; Sequence 7, Application US/08660678A
; Patent No. 5837857
; GENERAL INFORMATION:
; APPLICANT: Villeponteau, Bryant
; APPLICANT: Feng, Junli
; APPLICANT: Funk, Walter
; APPLICANT: Andrews, William H.
; TITLE OF INVENTION: Mammalian Telomerase
; NUMBER OF SEQUENCES: 30
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/660,678A
; FILING DATE: 05-JUN-1996
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/660,678A
; FILING DATE: 05-JUN-1996
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/330,123
; FILING DATE: 27-OCT-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-000811US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 26:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 20 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
; US-08-660-678A-26

Query Match          4.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 83;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      41 TTGTCTAACCCTAACTGAG 60
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; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 7:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 20 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
; US-08-660-678A-7

Query Match          4.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 83;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      2 GGTTCGGAGGCTGGGCGCTG 21
Db      20 GGTTCGGAGGCTGGGCGCTG 1

RESULT 124
US-08-660-678A-26/c
; Sequence 26, Application US/08660678A
; Patent No. 5837857
; GENERAL INFORMATION:
; APPLICANT: Villeponteau, Bryant
; APPLICANT: Feng, Junli
; APPLICANT: Funk, Walter
; APPLICANT: Andrews, William H.
; TITLE OF INVENTION: Mammalian Telomerase
; NUMBER OF SEQUENCES: 30
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/660,678A
; FILING DATE: 05-JUN-1996
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/330,123
; FILING DATE: 27-OCT-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/272,102
; FILING DATE: 07-JUL-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-000811US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 26:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 20 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
; US-08-660-678A-26

Query Match          4.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 83;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      41 TTGTCTAACCCTAACTGAG 60
```

```
Db      20 TTTGCTAAACCTAACTGAG 1
|||||
TITLE OF INVENTION: Telomerase
NUMBER OF SEQUENCES: 26
CORRESPONDENCE ADDRESS:
ADDRESSEE: TOWNSEND and TOWNSEND and CREW LLP
STREET: Two Embarcadero Center, 8th Floor
CITY: San Francisco
STATE: California
COUNTRY: USA
ZIP: 94111-3834
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
TITLE OF INVENTION: Mammalian Telomerase
NUMBER OF SEQUENCES: 30
CORRESPONDENCE ADDRESS:
ADDRESSEE: Townsend and Townsend and Crew LLP
STREET: Two Embarcadero Center, Eighth Floor
CITY: San Francisco
STATE: California
COUNTRY: USA
ZIP: 94111-3834
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/660,678A
FILING DATE: 05-JUN-1996
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/330,123
FILING DATE: 27-OCT-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/272,102
FILING DATE: 07-JUL-1994
ATTORNEY/AGENT INFORMATION:
NAME: Storella, John R.
REGISTRATION NUMBER: 32,944
REFERENCE/DOCKET NUMBER: 015389-000811US
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 576-0200
FAX: (415) 576-0300
INFORMATION FOR SEQ ID NO: 29:
SEQUENCE CHARACTERISTICS:
LENGTH: 20 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: RNA
US-08-660-678A-29

Query Match 4.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 83;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

RESULT 125
US-08-660-678A-29/c
; Sequence 29, Application US/08660678A
; Patent No. 5837857
; GENERAL INFORMATION:
; APPLICANT: Villeponteau, Bryant
; APPLICANT: Feng, Junli
; APPLICANT: Funk, Walter
; APPLICANT: Andrews, William H.
; TITLE OF INVENTION: Mammalian Telomerase
; NUMBER OF SEQUENCES: 30
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/660,678A
; FILING DATE: 05-JUN-1996
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/330,123
; FILING DATE: 27-OCT-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/272,102
; FILING DATE: 07-JUL-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-000811US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; FAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 29:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 20 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: RNA
; US-08-660-678A-29

Qy      2 GGTTCGGAGGCTGGGCTG 21
|||||
Query Match 4.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 83;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db      20 GGTTCGGAGGCTGGGCTG 1
|||||
TITLE OF INVENTION: Methods for Detecting the RNA Component of

Qy      361 AGCCCGCAGGAGGAGGACG 380
|||||
Db      20 AGCCCGCAGGAGGAGGACG 1
|||||

RESULT 127
US-08-770-565-6/c
; Sequence 6, Application US/08770565
; Patent No. 5846723
; GENERAL INFORMATION:
; APPLICANT: Kim, Nam Woo
; APPLICANT: Wu, Fred
; APPLICANT: Kealey, James T.
; APPLICANT: Pruzan, Ronald
; APPLICANT: Weinrich, Scott L.
; TITLE OF INVENTION: Methods for Detecting the RNA Component of
; NUMBER OF SEQUENCES: 26
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: TOWNSEND and TOWNSEND and CREW LLP
; STREET: Two Embarcadero Center, 8th Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/770,565
; FILING DATE: 20-DEC-1996
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-002300US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 415-576-0200
; FAX: 415-576-0300
; INFORMATION FOR SEQ ID NO: 3:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 20 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
; US-08-770-565-3

Query Match 4.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 83;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      361 AGCCCGCAGGAGGAGGACG 380
|||||
Db      20 AGCCCGCAGGAGGAGGACG 1
|||||

RESULT 128
US-08-770-565-3/c
; Sequence 3, Application US/08770565
; Patent No. 5846723
; GENERAL INFORMATION:
; APPLICANT: Kim, Nam Woo
; APPLICANT: Wu, Fred
; APPLICANT: Kealey, James T.
; APPLICANT: Pruzan, Ronald
; APPLICANT: Weinrich, Scott L.
; TITLE OF INVENTION: Methods for Detecting the RNA Component of
```

NAME: Storella, John R.  
REGISTRATION NUMBER: 32,944  
REFERENCE/DOCKET NUMBER: 015389-002300US  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 415-576-0200  
TELEFAX: 415-576-0300  
INFORMATION FOR SEQ ID NO: 6:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 20 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: DNA  
US-08-770-565-6

Query Match 4.4%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 83;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 300 GAAGAGTTGGCTCTGTGAC 319  
Db 20 GAAGAGTTGGCTCTGTGAC 1

RESULT 128  
US-08-770-565-7/c  
Sequence 7, Application US/08770565  
Patent No. 5846723  
GENERAL INFORMATION:  
APPLICANT: Kim, Nam Woo  
APPLICANT: Wu, Fred  
APPLICANT: Kealey, James T.  
APPLICANT: Pruzan, Ronald  
APPLICANT: Weinrich, Scott L.  
TITLE OF INVENTION: Methods for Detecting the RNA Component of  
TITLE OF INVENTION: Telomerase  
NUMBER OF SEQUENCES: 26  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: TOWNSEND and TOWNSEND and CREW LLP  
STREET: Two Embarcadero Center, 8th Floor  
CITY: San Francisco  
STATE: California  
COUNTRY: USA  
ZIP: 94111-3834  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/770,565  
FILING DATE: 20-DEC-1996  
CLASSIFICATION: 435  
ATTORNEY/AGENT INFORMATION:  
NAME: Storella, John R.  
REGISTRATION NUMBER: 32,944  
REFERENCE/DOCKET NUMBER: 015389-002300US  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 415-576-0200  
TELEFAX: 415-576-0300  
INFORMATION FOR SEQ ID NO: 7:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 20 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: DNA  
US-08-770-565-7

Query Match 4.4%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 83;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 290 CTGCCACCGGAGAGTTGG 309  
Db 20 CTGCCACCGGAGAGTTGG 1

RESULT 129  
US-08-770-565-13/c  
Sequence 13, Application US/08770565  
Patent No. 5846723  
GENERAL INFORMATION:  
APPLICANT: Kim, Nam Woo  
APPLICANT: Wu, Fred  
APPLICANT: Kealey, James T.  
APPLICANT: Pruzan, Ronald  
APPLICANT: Weinrich, Scott L.  
TITLE OF INVENTION: Methods for Detecting the RNA Component of  
TITLE OF INVENTION: Telomerase  
NUMBER OF SEQUENCES: 26  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: TOWNSEND and TOWNSEND and CREW LLP  
STREET: Two Embarcadero Center, 8th Floor  
CITY: San Francisco  
STATE: California  
COUNTRY: USA  
ZIP: 94111-3834  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/770,565  
FILING DATE: 20-DEC-1996  
CLASSIFICATION: 435  
ATTORNEY/AGENT INFORMATION:  
NAME: Storella, John R.  
REGISTRATION NUMBER: 32,944  
REFERENCE/DOCKET NUMBER: 015389-002300US  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 415-576-0200  
TELEFAX: 415-576-0300  
INFORMATION FOR SEQ ID NO: 13:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 20 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: DNA  
US-08-770-565-13

Query Match 4.4%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 83;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 159 TCTAGAGCAACAAAAATG 178  
Db 20 TCTAGAGCAACAAAAATG 1

RESULT 130  
US-08-485-778-6/c  
Sequence 6, Application US/08485778  
Patent No. 5876979  
GENERAL INFORMATION:  
APPLICANT: Andrews, William H.  
APPLICANT: Avilion, Ariel Athena  
APPLICANT: Feng, Junli  
APPLICANT: Greider, Carol  
APPLICANT: Marhuenda, Maria Antonia Blasco  
APPLICANT: Villeponteau, Bryant  
TITLE OF INVENTION: RNA COMPONENT OF TELOMERASE  
NUMBER OF SEQUENCES: 45

```
;
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Hamilton, Brook, Smith & Reynolds, P.C.
; STREET: Two Militia Drive
; CITY: Lexington
; STATE: MA
; COUNTRY: US
; ZIP: 02173
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/485,778
; FILING DATE: 07-JE-1995
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/387,524
; FILING DATE: 13-FEB-1995
; APPLICATION NUMBER: US 08/330,123
; FILING DATE: 27-OCT-1994
; APPLICATION NUMBER: US 08/272,102
; FILING DATE: 07-JUL-1994
; NAME: Granahan, Patricia
; REGISTRATION NUMBER: 32,227
; REFERENCE/DOCKET NUMBER: CSHL94-05A4
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617-861-9540
; TELEFAX: 617-861-9540
; INFORMATION FOR SEQ ID NO: 6:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 20 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; US-08-485-778-6

Query Match 4.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 83;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 41 TTTGCTTAACCTAACTGAG 60
Db 20 TTTGCTTAACCTAACTGAG 1

RESULT 131
US-08-485-778-9/c
; Sequence 9, Application US/08485778
; Patent No. 5876979
; GENERAL INFORMATION:
; APPLICANT: Andrews, William H.
; APPLICANT: Avilion, Ariel Athena
; APPLICANT: Feng, Junli
; APPLICANT: Funk, Walter
; APPLICANT: Greider, Carol
; APPLICANT: Marhuenda, Maria Antonia Blasco
; APPLICANT: Villeponteau, Bryant
; TITLE OF INVENTION: RNA COMPONENT OF TELOMERASE
; NUMBER OF SEQUENCES: 45
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Hamilton, Brook, Smith & Reynolds, P.C.
; STREET: Two Militia Drive
; CITY: Lexington
; STATE: MA
; COUNTRY: US
; ZIP: 02173
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
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;
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/485,778
; FILING DATE: 07-JE-1995
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/387,524
; FILING DATE: 13-FEB-1995
; APPLICATION NUMBER: US 08/330,123
; FILING DATE: 27-OCT-1994
; APPLICATION NUMBER: US 08/272,102
; FILING DATE: 07-JUL-1994
; NAME: Granahan, Patricia
; REGISTRATION NUMBER: 32,227
; REFERENCE/DOCKET NUMBER: CSHL94-05A4
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617-861-9540
; TELEFAX: 617-861-9540
; INFORMATION FOR SEQ ID NO: 9:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 20 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; US-08-485-778-9

Query Match 4.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 83;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 GGTTCGGAGGGTGGCGCTG 21
Db 20 GGTTCGGAGGGTGGCGCTG 1

RESULT 132
US-08-472-802C-8/c
; Sequence 8, Application US/08472802C
; Patent No. 5958680
; GENERAL INFORMATION:
; APPLICANT: Villeponteau, Bryant
; APPLICANT: Feng, Junli
; APPLICANT: Andrews, William H.
; TITLE OF INVENTION: Mammalian Telomerase
; NUMBER OF SEQUENCES: 44
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/472,802C
; FILING DATE: 07-JUN-1995
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/272,102
; FILING DATE: 07-JUL-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/330,123
; FILING DATE: 27-OCT-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: Smith, William M.
```

```
;
; REGISTRATION NUMBER: 30,223
; REFERENCE/DOCKET NUMBER: 15389-000820
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 8:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 20 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
;
US-08-472-802C-8
Query Match 4.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 83;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 GGTGGCGAGGTGGGCTG 21
| | | | | | | | | | | | | | | | | | | |
Db 20 GGTGGCGAGGTGGGCTG 1

RESULT 133
US-08-472-802C-41/c
; Sequence 41, Application US/08472802C
; Patent No. 5958680
; GENERAL INFORMATION:
; APPLICANT: Villeponteau, Bryant
; APPLICANT: Feng, Junli
; APPLICANT: Andrews, William H.
; TITLE OF INVENTION: Mammalian Telomerase
; NUMBER OF SEQUENCES: 44
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/472,802C
; FILING DATE: 07-JUN-1995
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/272,102
; FILING DATE: 07-JUL-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/330,123
; FILING DATE: 27-OCT-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: Smith, William M.
; REGISTRATION NUMBER: 30,223
; REFERENCE/DOCKET NUMBER: 15389-000820
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 41:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 20 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: RNA
;
US-08-472-802C-41
Query Match 4.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 83;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

;
; REGISTRATION NUMBER: 30,223
; REFERENCE/DOCKET NUMBER: 15389-000820
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 8:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 20 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
;
US-08-833-377-7/c
; Sequence 7, Application US/08833377
; Patent No. 5968506
; GENERAL INFORMATION:
; APPLICANT: Weinrich, Scott L.
; APPLICANT: Ackinson III, Edward M.
; APPLICANT: Lichtsteiner, Serge P.
; APPLICANT: Vasserot, Alain P.
; APPLICANT: Pruzan, Ronald A.
; APPLICANT: Kealey, James T.
; TITLE OF INVENTION: Purified Telomerase
; NUMBER OF SEQUENCES: 15
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/833,377
; FILING DATE: 04-APR-1997
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/510,736
; FILING DATE: 04-AUG-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-001110US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 7:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 20 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
; FEATURE:
; NAME/KEY:
; LOCATION: 1..20
; OTHER INFORMATION: /note= "Oligo 14ab"
;
US-08-833-377-7
Query Match 4.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 83;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 361 AGGCCGCGAGGAGGGAACG 380
| | | | | | | | | | | | | | | | | | | |
Db 20 AGGCCGCGAGGAGGGAACG 1

RESULT 135
US-08-520-550A-6/c
; Sequence 6, Application US/08520550A
; Patent No. 6013468
; GENERAL INFORMATION:
```

APPLICANT: Andrews, William H.  
APPLICANT: Avilion, Ariel A.  
APPLICANT: Feng, Junli  
APPLICANT: Funk, Walter  
APPLICANT: Greider, Carol  
APPLICANT: Marhuenda, Maria A. B.  
APPLICANT: Villeponteau, Bryant  
TITLE OF INVENTION: RNA Component of Telomerase  
NUMBER OF SEQUENCES: 47  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Hamilton, Brook, Smith & Reynolds, P.C.  
STREET: Two Militia Drive  
CITY: Lexington  
STATE: MA  
COUNTRY: US  
ZIP: 02173  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/520.550A  
FILING DATE: 29-AUG-1995  
CLASSIFICATION: 435  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/387,524  
FILING DATE: 13-FEB-1995  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/330,123  
FILING DATE: 27-OCT-1994  
APPLICATION NUMBER: US 08/272,102  
FILING DATE: 07-JUL-1994  
ATTORNEY/AGENT INFORMATION:  
NAME: Granahan, Patricia  
REGISTRATION NUMBER: 32,227  
REFERENCE/DOCKET NUMBER: CSHL94-05A3B  
TELEPHONE: 617-861-9540  
TELEFAX: 617-861-9540  
INFORMATION FOR SEQ ID NO: 6:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 20 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
US-08-520-550A-6

Query Match 4.4%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 83;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 41 TTTGCTTAACCTAACTGAG 60  
|||||  
Db 20 TTTGCTTAACCTAACTGAG 1

RESULT 136  
US-08-520-550A-9/c  
Sequence 9, Application US/08520550A  
Patent No. 6013468  
GENERAL INFORMATION:  
APPLICANT: Andrews, William H.  
APPLICANT: Avilion, Ariel A.  
APPLICANT: Feng, Junli  
APPLICANT: Funk, Walter  
APPLICANT: Greider, Carol  
APPLICANT: Marhuenda, Maria A. B.  
APPLICANT: Villeponteau, Bryant  
TITLE OF INVENTION: RNA Component of Telomerase  
NUMBER OF SEQUENCES: 47  
CORRESPONDENCE ADDRESS:

ADDRESSEE: Hamilton, Brook, Smith & Reynolds, P.C.  
STREET: Two Militia Drive  
CITY: Lexington  
STATE: MA  
COUNTRY: US  
ZIP: 02173  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/520.550A  
FILING DATE: 29-AUG-1995  
CLASSIFICATION: 435  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/387,524  
FILING DATE: 13-FEB-1995  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/330,123  
FILING DATE: 27-OCT-1994  
APPLICATION NUMBER: US 08/272,102  
FILING DATE: 07-JUL-1994  
ATTORNEY/AGENT INFORMATION:  
NAME: Granahan, Patricia  
REGISTRATION NUMBER: 32,227  
REFERENCE/DOCKET NUMBER: CSHL94-05A3B  
TELEPHONE: 617-861-9540  
TELEFAX: 617-861-9540  
INFORMATION FOR SEQ ID NO: 9:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 20 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
US-08-520-550A-9

Query Match 4.4%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 83;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2 GGTTCGGAGGTGGCGCTG 21  
|||||  
Db 20 GGTTCGGAGGTGGCGCTG 1

RESULT 137  
US-08-630-019A-13/c  
Sequence 13, Application US/08630019A  
Patent No. 6015710  
GENERAL INFORMATION:  
APPLICANT: Shay, Jerry W.  
APPLICANT: Wright, Woodring E.  
APPLICANT: Piatyszek, Mieczyslaw A.  
APPLICANT: Corey, David  
APPLICANT: No. 6015710ton, James C.  
TITLE OF INVENTION: Modulation of Mammalian Telomerase by  
TITLE OF INVENTION: Peptide Nucleic Acids  
NUMBER OF SEQUENCES: 46  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Townsend and Townsend and Crew LLP  
STREET: Two Embarcadero Center, Eighth Floor  
CITY: San Francisco  
STATE: California  
COUNTRY: USA  
ZIP: 94111-3834  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.30

```
/
/ CURRENT APPLICATION DATA:
/ APPLICATION NUMBER: US/08/630,019A
/ FILING DATE: 09-JUN-1996
/ CLASSIFICATION: 536
/ ATTORNEY/AGENT INFORMATION:
/ NAME: Storella, John R.
/ REGISTRATION NUMBER: 32,944
/ REFERENCE/DOCKET NUMBER: 015389-001600US
/ TELECOMMUNICATION INFORMATION:
/ TELEPHONE: (415) 576-0200
/ TELEFAX: (415) 576-0300
/ INFORMATION FOR SEQ ID NO: 13:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 20 base pairs
/ TYPE: nucleic acid
/ STRANDEDNESS: single
/ TOPOLOGY: linear
/ MOLECULE TYPE: other nucleic acid
/ DESCRIPTION: /desc = "peptide nucleic acid (PNA),
/ DESCRIPTION: where (deoxy)ribose-phosphate linkages are replaced by
/ DESCRIPTION: N-(2-aminoethyl)glycine units linked to nucleotide bases via
/ DESCRIPTION: glycine amino nitrogen through a methylenecarbonyl linker"
/
/ US-08-630-019A-13
/
/ Query Match 4.4%; Score 20; DB 1; Length 20;
/ Best Local Similarity 100.0%; Pred. No. 83;
/ Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
/
/ QY 46 CTAACCCCTAACTGAGAAGG 65
/ Db 20 CTAACCCCTAACTGAGAAGG 1
/
/ RESULT 138
/ US-08-838-545-41/c
/ Sequence 41, Application US/08838545
/ Patent No. 6046307
/ GENERAL INFORMATION:
/ APPLICANT: Shay, Jerry W.
/ APPLICANT: Wright, Woodring E.
/ APPLICANT: Piatyszek, Mieczyslaw A.
/ APPLICANT: Corey, David R.
/ APPLICANT: No. 6046307ton, James C.
/ TITLE OF INVENTION: Modulation of Mammalian Telomerase by
/ TITLE OF INVENTION: Peptide Nucleic Acids
/ NUMBER OF SEQUENCES: 60
/ CORRESPONDENCE ADDRESS:
/ ADDRESSEE: Townsend and Townsend and Crew LLP
/ STREET: Two Embarcadero Center, Eighth Floor
/ CITY: San Francisco
/ STATE: California
/ COUNTRY: USA
/ ZIP: 94111-3834
/ COMPUTER READABLE FORM:
/ MEDIUM TYPE: Floppy disk
/ COMPUTER: IBM PC compatible
/ OPERATING SYSTEM: PC-DOS/MS-DOS
/ SOFTWARE: PatentIn Release #1.0, Version #1.30
/ CURRENT APPLICATION DATA:
/ APPLICATION NUMBER: US/08/838,545
/ FILING DATE: 09-APR-1997
/ CLASSIFICATION: 536
/ PRIOR APPLICATION DATA:
/ APPLICATION NUMBER: US 08/630,019
/ FILING DATE: 09-APR-1996
/ ATTORNEY/AGENT INFORMATION:
/ NAME: Storella, John R.
/ REGISTRATION NUMBER: 32,944
/ REFERENCE/DOCKET NUMBER: 015389-001610US
/ TELECOMMUNICATION INFORMATION:
/ TELEPHONE: (415) 576-0300
/ TELEFAX: (415) 576-0300
/ INFORMATION FOR SEQ ID NO: 41:
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/
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 20 base pairs
/ TYPE: nucleic acid
/ STRANDEDNESS: single
/ TOPOLOGY: linear
/ MOLECULE TYPE: other nucleic acid
/ DESCRIPTION: /desc = "peptide nucleic acid (PNA),
/ DESCRIPTION: where (deoxy)ribose-phosphate linkages are replaced by
/ DESCRIPTION: N-(2-aminoethyl)glycine units linked to nucleotide bases via
/ DESCRIPTION: glycine amino N through a methylenecarbonyl linker"
/
/ US-08-838-545-41
/
/ Query Match 4.4%; Score 20; DB 1; Length 20;
/ Best Local Similarity 100.0%; Pred. No. 83;
/ Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
/
/ QY 46 CTAACCCCTAACTGAGAAGG 65
/ Db 20 CTAACCCCTAACTGAGAAGG 1
/
/ RESULT 139
/ US-08-998-443-7/c
/ Sequence 7, Application US/08998443
/ Patent No. 6054575
/ GENERAL INFORMATION:
/ APPLICANT: Villeponteau, Bryant
/ APPLICANT: Feng, Junli
/ APPLICANT: Funk, Walter
/ APPLICANT: Andrews, William H.
/ TITLE OF INVENTION: Mammalian Telomerase
/ NUMBER OF SEQUENCES: 30
/ CORRESPONDENCE ADDRESS:
/ ADDRESSEE: Townsend and Townsend and Crew LLP
/ STREET: Two Embarcadero Center, Eighth Floor
/ CITY: San Francisco
/ STATE: California
/ COUNTRY: USA
/ ZIP: 94111-3834
/ COMPUTER READABLE FORM:
/ MEDIUM TYPE: Floppy disk
/ COMPUTER: IBM PC compatible
/ OPERATING SYSTEM: PC-DOS/MS-DOS
/ SOFTWARE: PatentIn Release #1.0, Version #1.30
/ CURRENT APPLICATION DATA:
/ APPLICATION NUMBER: US/08/998,443
/ FILING DATE:
/ CLASSIFICATION:
/ PRIOR APPLICATION DATA:
/ APPLICATION NUMBER: US/08/660,678
/ FILING DATE: 05-JUN-1996
/ APPLICATION NUMBER: US 08/330,123
/ FILING DATE: 27-OCT-1994
/ PRIOR APPLICATION DATA:
/ APPLICATION NUMBER: US 08/272,102
/ FILING DATE: 07-JUL-1994
/ ATTORNEY/AGENT INFORMATION:
/ NAME: Storella, John R.
/ REGISTRATION NUMBER: 32,944
/ REFERENCE/DOCKET NUMBER: 015389-000811US
/ TELECOMMUNICATION INFORMATION:
/ TELEPHONE: (415) 576-0200
/ TELEFAX: (415) 576-0300
/ INFORMATION FOR SEQ ID NO: 7:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 20 base pairs
/ TYPE: nucleic acid
/ STRANDEDNESS: single
/ TOPOLOGY: linear
/ MOLECULE TYPE: DNA
/
/ US-08-998-443-7
/
/ Query Match 4.4%; Score 20; DB 1; Length 20;
```



```
Best Local Similarity 100.0%; Pred. No. 83;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2 GGTTCGGAGGGTGGGCTG 21
Db 20 GGTTCGGAGGGTGGGCTG 1

RESULT 140
US-08-998-443-26/c
; Sequence 26, Application US/08998443
; Patent No. 6054575
; GENERAL INFORMATION:
; APPLICANT: Villeponteau, Bryant
; APPLICANT: Feng, Junli
; APPLICANT: Funk, Walter
; APPLICANT: Andrews, William H.
; TITLE OF INVENTION: Mammalian Telomerase
; NUMBER OF SEQUENCES: 30
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/998,443
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/08/660,678
; FILING DATE: 05-JUN-1996
; APPLICATION NUMBER: US 08/330,123
; FILING DATE: 27-OCT-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/272,102
; FILING DATE: 07-JUL-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-000811US
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 26:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 20 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
US-08-998-443-26

Query Match 4.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 83;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 41 TTGTCTAACCCCTAAGTGA 60
Db 20 TTGTCTAACCCCTAAGTGA 1

RESULT 141
US-08-998-443-29/c
; Sequence 29, Application US/08998443
; Patent No. 6054575
; GENERAL INFORMATION:
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```
; APPLICANT: Villeponteau, Bryant
; APPLICANT: Feng, Junli
; APPLICANT: Funk, Walter
; APPLICANT: Andrews, William H.
; TITLE OF INVENTION: Mammalian Telomerase
; NUMBER OF SEQUENCES: 30
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/998,443
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/08/660,678
; FILING DATE: 05-JUN-1996
; APPLICATION NUMBER: US 08/330,123
; FILING DATE: 27-OCT-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/272,102
; FILING DATE: 07-JUL-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-000811US
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 29:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 20 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: RNA
US-08-998-443-29

Query Match 4.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 83;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2 GGTTCGGAGGGTGGGCTG 21
Db 20 GGTTCGGAGGGTGGGCTG 1

RESULT 142
US-09-060-523-7/c
; Sequence 7, Application US/09060523
; Patent No. 6256535
; GENERAL INFORMATION:
; APPLICANT: Villeponteau, Bryant
; APPLICANT: Feng, Junli
; APPLICANT: Funk, Walter
; APPLICANT: Andrews, William H.
; TITLE OF INVENTION: Mammalian Telomerase
; NUMBER OF SEQUENCES: 25
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
```

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;
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/060,523
; FILING DATE: 14-APR-1998
; CLASSIFICATION: 536
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/660,678
; FILING DATE: 05-JUN-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/330,123
; FILING DATE: 27-OCT-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/272,102
; FILING DATE: 07-JUL-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-000813US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 7:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 20 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
;
US-09-060-523-7

Query Match 4.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 83;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 GGTTGCGAGGCTGGGCTG 21
Db 20 GGTTGCGAGGCTGGGCTG 1

RESULT 143
US-09-349-532-41/C
; Sequence 41, Application US/09349532
; Patent No. 6294650
; GENERAL INFORMATION:
; APPLICANT: Shay, Jerry W.
; APPLICANT: Wright, Woodring E.
; APPLICANT: Piatyszek, Mieczyslaw A.
; APPLICANT: Corey, David R.
; APPLICANT: No. 6294650ton, James C.
; TITLE OF INVENTION: Modulation of Mammalian Telomerase by
; TITLE OF INVENTION: Peptide Nucleic Acids
; NUMBER OF SEQUENCES: 60
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/349,532
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
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```
;
; APPLICATION NUMBER: US 08/838,545
; FILING DATE: 09-APR-1997
; APPLICATION NUMBER: US 08/630,019
; FILING DATE: 09-APR-1996
; ATTORNEY/AGENT INFORMATION:
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-001610US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 41:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 20 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: other nucleic acid
; DESCRIPTION: /desc = "peptide nucleic acid (PNA),
; DESCRIPTION: where (deoxy/ribose-phosphate linkages are replaced by
; DESCRIPTION: N-(2-aminoethyl)glycine units linked to nucleotide bases via
; DESCRIPTION: glycine amino N through a methylenecarbonyl linker"
;
US-09-349-532-41

Query Match 4.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 83;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 46 CTAACCCCTAACTGAGAAGG 65
Db 20 CTAACCCCTAACTGAGAAGG 1

RESULT 144
US-09-580-517-4/C
; Sequence 4, Application US/09580517
; Patent No. 6320039
; GENERAL INFORMATION:
; APPLICANT: VILLEPONTEAU, Bryant
; FENG, Junli
; FUNK, Walter
; ANDREWS, William H.
; TITLE OF INVENTION: HUMAN TELOMERASE
; NUMBER OF SEQUENCES: 25
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend Khourie and Crew
; STREET: 379 Lytton Avenue
; CITY: Palo Alto
; STATE: California
; COUNTRY: US
; ZIP: 94301
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/580,517
; FILING DATE: 25-May-2000
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/330,123
; FILING DATE: <Unknown>
; ATTORNEY/AGENT INFORMATION:
; NAME: Smith, William M
; REGISTRATION NUMBER: 30,223
; REFERENCE/DOCKET NUMBER: 15389-000810
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 326-2400
; TELEFAX: (415) 326-2422
; INFORMATION FOR SEQ ID NO: 4:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 20 base pairs
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; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: RNA
; SEQUENCE DESCRIPTION: SEQ ID NO: 4:
US-09-580-517-4
      4.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 83;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 41 TTGTCTAACCTTAACGAG 60
Db 20 TTGTCTAACCTTAACGAG 1

RESULT 145
US-09-580-517-7/c
; Sequence 7, Application US/09580517
; Patent No. 6320039
; GENERAL INFORMATION:
; APPLICANT: VILLEPONTEAU, Bryant
; FENG, Junli
; FUNK, Walter
; ANDREWS, William H.
; TITLE OF INVENTION: HUMAN TELOMERASE
; NUMBER OF SEQUENCES: 25
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend Khourie and Crew
; STREET: 379 Lytton Avenue
; CITY: Palo Alto
; STATE: California
; COUNTRY: US
; ZIP: 94301
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/580,517
; FILING DATE: 25-May-2000
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/330,123
; FILING DATE: <Unknown>
; ATTORNEY/AGENT INFORMATION:
; NAME: Smith, William M
; REGISTRATION NUMBER: 30,223
; REFERENCE/DOCKET NUMBER: 15389-000810
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 326-2400
; TELEFAX: (415) 326-2422
; INFORMATION FOR SEQ ID NO: 7:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 20 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
; SEQUENCE DESCRIPTION: SEQ ID NO: 7:
US-09-580-517-7
      4.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 83;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2 GGTTCGGAGGGTGGGCGCTG 21
Db 20 GGTTCGGAGGGTGGGCGCTG 1

RESULT 146
US-09-580-517-7/c
; Sequence 7, Application US/09580517
; Patent No. 6320039
; GENERAL INFORMATION:
; APPLICANT: VILLEPONTEAU, Bryant
; FENG, Junli
; FUNK, Walter
; ANDREWS, William H.
; TITLE OF INVENTION: HUMAN TELOMERASE
; NUMBER OF SEQUENCES: 25
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend Khourie and Crew
; STREET: 379 Lytton Avenue
; CITY: Palo Alto
; STATE: California
; COUNTRY: US
; ZIP: 94301
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/580,517
; FILING DATE: 25-May-2000
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/330,123
; FILING DATE: <Unknown>
; ATTORNEY/AGENT INFORMATION:
; NAME: Smith, William M
; REGISTRATION NUMBER: 30,223
; REFERENCE/DOCKET NUMBER: 15389-000810
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 326-2400
; TELEFAX: (415) 326-2422
; INFORMATION FOR SEQ ID NO: 7:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 20 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
; SEQUENCE DESCRIPTION: SEQ ID NO: 7:
US-09-580-517-7
      4.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 83;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2 GGTTCGGAGGGTGGGCGCTG 21
Db 20 GGTTCGGAGGGTGGGCGCTG 1

RESULT 146
US-09-580-517-7/c
; Sequence 7, Application US/09057351
; Patent No. 6548298
; GENERAL INFORMATION:
; APPLICANT: VILLEPONTEAU, Bryant
; FENG, Junli
; FUNK, Walter
; ANDREWS, William H.
; TITLE OF INVENTION: Mammalian Telomerase
; NUMBER OF SEQUENCES: 42
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/057,351
; FILING DATE: 08-APR-1994
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/272,102
; FILING DATE: 07-JUL-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/330,123
; FILING DATE: 27-OCT-1994
; APPLICATION NUMBER: US 08/472,802
; FILING DATE: 07-JUN-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-000821US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 7:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 20 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
; SEQUENCE DESCRIPTION: SEQ ID NO: 7:
US-09-057-351-7
      4.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 83;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2 GGTTCGGAGGGTGGGCGCTG 21
Db 20 GGTTCGGAGGGTGGGCGCTG 1

RESULT 147
US-09-057-351-40/c
; Sequence 40, Application US/09057351
; Patent No. 6548298
; GENERAL INFORMATION:
; APPLICANT: VILLEPONTEAU, Bryant
; FENG, Junli
; FUNK, Walter
; ANDREWS, William H.
; TITLE OF INVENTION: Mammalian Telomerase
; NUMBER OF SEQUENCES: 42
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
```

```
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/057,351
; FILING DATE: 08-APR-1994
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/272,102
; FILING DATE: 07-JUL-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/330,123
; FILING DATE: 27-OCT-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/472,802
; FILING DATE: 07-JUN-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-000821US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 40:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 20 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: RNA
; US-09-057-351-40

Query Match 4.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 83;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 41 TTGTCTAACCTTAACCTGAG 60
Db 20 TTGTCTAACCTTAACCTGAG 1

RESULT 148
US-08-770-565-9/c
; Sequence 9, Application US/08770565
; Patent No. 5846723
; GENERAL INFORMATION:
; APPLICANT: Kim, Nam Woo
; APPLICANT: Wu, Fred
; APPLICANT: Kealey, James T.
; APPLICANT: Pruzan, Ronald
; APPLICANT: Weinrich, Scott L.
; TITLE OF INVENTION: Methods for Detecting the RNA Component of
; TITLE OF INVENTION: Telomerase
; NUMBER OF SEQUENCES: 26
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: TOWNSEND and TOWNSEND and CREW LLP
; STREET: Two Embarcadero Center, 8th Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
```

```
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/770,565
; FILING DATE: 20-DEC-1996
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-002300US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 415-576-0200
; TELEFAX: 415-576-0300
; INFORMATION FOR SEQ ID NO: 9:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 19 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
; US-08-770-565-9

Query Match 4.2%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 93;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 148 CCACCGTTCATTCTAGAGC 166
Db 19 CCACCGTTCATTCTAGAGC 1

RESULT 149
US-08-838-545-60
; Sequence 60, Application US/08838545
; Patent No. 6046307
; GENERAL INFORMATION:
; APPLICANT: Shay, Jerry W.
; APPLICANT: Wright, Woodring E.
; APPLICANT: Piatyszek, Mieczyslaw A.
; APPLICANT: Corey, David R.
; APPLICANT: No. 6046307ton, James C.
; TITLE OF INVENTION: Modulation of Mammalian Telomerase by
; TITLE OF INVENTION: Peptide Nucleic Acids
; NUMBER OF SEQUENCES: 60
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/838,545
; FILING DATE: 09-APR-1997
; CLASSIFICATION: 536
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/630,019
; FILING DATE: 09-APR-1996
; ATTORNEY/AGENT INFORMATION:
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-001610US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 60:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 19 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
```

```
; TOPOLOGY: linear
; MOLECULE TYPE: RNA (genomic)
US-08-838-545-60

Query Match 4.2%; Score 19; DB 1; Length 19;
Best Local Similarity 78.9%; Pred. No. 93;
Matches 15; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

Qy 44 GTCTAACCTTAACGTAGAA 62
Db 1 GUCUACCCUACUGAGAA 19

RESULT 150
US-09-349-532-60
; Sequence 60, Application US/09349532
; Patent No. 6294650
; GENERAL INFORMATION:
; APPLICANT: Shay, Jerry W.
; APPLICANT: Wright, Woodring E.
; APPLICANT: Piatyszek, Mieczyslaw A.
; APPLICANT: Corey, David R.
; APPLICANT: No. 6294650ton, James C.
; TITLE OF INVENTION: Modulation of Mammalian Telomerase by
; TITLE OF INVENTION: Peptide Nucleic Acids
; NUMBER OF SEQUENCES: 60
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/349,532
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/838,545
; FILING DATE: 09-APR-1997
; APPLICATION NUMBER: US 08/630,019
; FILING DATE: 09-APR-1996
; ATTORNEY/AGENT INFORMATION:
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-001610US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 60:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 19 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: RNA (genomic)
US-09-349-532-60

Query Match 4.2%; Score 19; DB 1; Length 19;
Best Local Similarity 78.9%; Pred. No. 93;
Matches 15; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

Qy 44 GTCTAACCTTAACGTAGAA 62
Db 1 GUCUACCCUACUGAGAA 19

RESULT 151
US-09-018-125-2/c
; Sequence 2, Application US/09018125A
; Patent No. 6468983
; GENERAL INFORMATION:
; APPLICANT: Silverman, Robert H.
; APPLICANT: Kondo, Seiji
; APPLICANT: Cowell, John K.
; APPLICANT: Li, Guiying
; APPLICANT: Torrence, Paul F.
; TITLE OF INVENTION: RNASE L ACTIVATORS AND ANTISENSE OLIGONUCLEOTIDES
; TITLE OF INVENTION: EFFECTIVE TO TREAT TELOMERASE-EXPRESSING MALIGNANCIES
; FILE REFERENCE: 8656-022
; CURRENT APPLICATION NUMBER: US/09/018,125A
; CURRENT FILING DATE: 1999-02-03
; EARLIER APPLICATION NUMBER: 60/044,507
; EARLIER FILING DATE: 1997-04-21
; NUMBER OF SEQ ID NOS: 9
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 2
; LENGTH: 19
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:
; OTHER INFORMATION: oligonucleotide
US-09-018-125-2

Query Match 4.2%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 93;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 76 GTGCTTTTGTCTCCCGCGC 94
Db 19 GTGCTTTTGTCTCCCGCGC 1

RESULT 152
US-08-833-377-14/c
; Sequence 14, Application US/08833377
; Patent No. 5968506
; GENERAL INFORMATION:
; APPLICANT: Weinrich, Scott L.
; APPLICANT: Atkinson III, Edward M.
; APPLICANT: Lichtsteiner, Serge P.
; APPLICANT: Vasserot, Alain P.
; APPLICANT: Pruzan, Ronald A.
; APPLICANT: Kealey, James T.
; TITLE OF INVENTION: Purified Telomerase
; NUMBER OF SEQUENCES: 15
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/833,377
; FILING DATE: 04-APR-1997
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/510,736
; FILING DATE: 04-AUG-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-001110US
; TELECOMMUNICATION INFORMATION:
```

; TELEPHONE: (415) 576-0200  
; TELEFAX: (415) 576-0300  
; INFORMATION FOR SEQ ID NO: 14:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 20 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: DNA  
; FEATURE:  
; NAME/KEY: modified\_base  
; LOCATION: 1  
; OTHER INFORMATION: /mod base= OTHER  
; OTHER INFORMATION: /note= "N = 5' biotinylated cytidine"  
; FEATURE:  
; NAME/KEY: -  
; LOCATION: 1..20  
; OTHER INFORMATION: /note= "biotinylated Oligo 14ab"  
; US-08-833-377-14

Query Match 4.2%; Score 19; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 99;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 361 AGGCCGAGGAGGAAC 379  
| | | | | | | | | | | | | | | | | | | | | |  
Db 20 AGGCCGAGGAGGAAC 2

RESULT 153  
US-08-838-545-9/c  
; Sequence 9, Application US/08838545  
; Patent No. 6046307  
; GENERAL INFORMATION:  
; APPLICANT: Shay, Jerry W.  
; APPLICANT: Wright, Woodring E.  
; APPLICANT: Piatyszek, Mieczyslaw A.  
; APPLICANT: Corey, David R.  
; APPLICANT: No. 6046307ton, James C.  
; TITLE OF INVENTION: Modulation of Mammalian Telomerase by  
; NUMBER OF SEQUENCES: 60  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Townsend and Townsend and Crew LLP  
; STREET: Two Embarcadero Center, Eighth Floor  
; CITY: San Francisco  
; STATE: California  
; COUNTRY: USA  
; ZIP: 94111-3834  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.30  
; CURRENT APPLICATION NUMBER: US/08/838,545  
; FILING DATE: 09-APR-1997  
; CLASSIFICATION: 536  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/630,019  
; FILING DATE: 09-APR-1996  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Storella, John R.  
; REGISTRATION NUMBER: 32,944  
; REFERENCE/DOCKET NUMBER: 015389-001610US  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (415) 576-0200  
; TELEFAX: (415) 576-0300  
; INFORMATION FOR SEQ ID NO: 9:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 18 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single

; TOPOLOGY: linear  
; MOLECULE TYPE: other nucleic acid  
; DESCRIPTION: /desc = "peptide nucleic acid (PNA),  
; DESCRIPTION: where (deoxy(ribose-phosphate linkages are replaced by  
; DESCRIPTION: N-(2-aminoethyl)glycine units linked to nucleotide bases via  
; DESCRIPTION: glycine amino N through a methylenecarbonyl linker"  
; US-08-838-545-9

Query Match 4.0%; Score 18; DB 1; Length 18;  
Best Local Similarity 100.0%; Pred. No. 1e+02;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 48 AACCCCTAACTGAGAGGG 65  
| | | | | | | | | | | | | | | | | | | | | |  
Db 18 AACCCCTAACTGAGAGGG 1

RESULT 154  
US-09-349-532-9/c  
; Sequence 9, Application US/09349532  
; Patent No. 6294650  
; GENERAL INFORMATION:  
; APPLICANT: Shay, Jerry W.  
; APPLICANT: Wright, Woodring E.  
; APPLICANT: Piatyszek, Mieczyslaw A.  
; APPLICANT: Corey, David R.  
; APPLICANT: No. 6294650ton, James C.  
; TITLE OF INVENTION: Modulation of Mammalian Telomerase by  
; NUMBER OF SEQUENCES: 60  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Townsend and Townsend and Crew LLP  
; STREET: Two Embarcadero Center, Eighth Floor  
; CITY: San Francisco  
; STATE: California  
; COUNTRY: USA  
; ZIP: 94111-3834  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.30  
; CURRENT APPLICATION NUMBER: US/09/349,532  
; FILING DATE:  
; CLASSIFICATION:  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/838,545  
; FILING DATE: 09-APR-1997  
; APPLICATION NUMBER: US 08/630,019  
; FILING DATE: 09-APR-1996  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Storella, John R.  
; REGISTRATION NUMBER: 32,944  
; REFERENCE/DOCKET NUMBER: 015389-001610US  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (415) 576-0200  
; TELEFAX: (415) 576-0300  
; INFORMATION FOR SEQ ID NO: 9:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 18 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: other nucleic acid  
; DESCRIPTION: /desc = "peptide nucleic acid (PNA),  
; DESCRIPTION: where (deoxy(ribose-phosphate linkages are replaced by  
; DESCRIPTION: N-(2-aminoethyl)glycine units linked to nucleotide bases via  
; DESCRIPTION: glycine amino N through a methylenecarbonyl linker"  
; US-09-349-532-9

Query Match 4.0%; Score 18; DB 1; Length 18;  
Best Local Similarity 100.0%; Pred. No. 1e+02;

Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 48 AACCTAACTGAGAGGG 65  
|||||  
Db 18 AACCTAACTGAGAGGG 1

## RESULT 155

US-08-770-565-14/c  
; Sequence 14, Application US/08770565  
; Patent No. 5846723  
; GENERAL INFORMATION:  
; APPLICANT: Kim, Nam Woo  
; APPLICANT: Wu, Fred  
; APPLICANT: Kealey, James T.  
; APPLICANT: Pruzan, Ronald  
; APPLICANT: Weinrich, Scott L.  
; TITLE OF INVENTION: Methods for Detecting the RNA Component of  
; TITLE OF INVENTION: Telomerase  
; NUMBER OF SEQUENCES: 26  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: TOWNSEND AND TOWNSEND AND CREW LLP  
; STREET: Two Embarcadero Center, 8th Floor  
; CITY: San Francisco  
; STATE: California  
; COUNTRY: USA  
; ZIP: 94111-3834  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/770,565  
; FILING DATE: 20-DEC-1996  
; CLASSIFICATION: 435  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Storella, John R.  
; REGISTRATION NUMBER: 32,944  
; REFERENCE/DOCKET NUMBER: 015389-002300US  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: 415-576-0200  
; TELEFAX: 415-576-0300  
; INFORMATION FOR SEQ ID NO: 14:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 17 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: DNA  
US-08-770-565-14

Query Match 3.8%; Score 17; DB 1; Length 17;  
Best Local Similarity 100.0%; Pred. No. 1.2e+02;  
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 177 TGTGAGCTGCTGGCCCG 193  
|||||  
Db 17 TGTGAGCTGCTGGCCCG 1

## RESULT 156

US-08-974-549A-543/c  
; Sequence 543, Application US/08974549A  
; Patent No. 6166178  
; GENERAL INFORMATION:  
; APPLICANT: Cech, Thomas R.  
; APPLICANT: Lingner, Joachim  
; APPLICANT: Nakamura, Toru  
; APPLICANT: Chapman, Karen B.  
; APPLICANT: Morin, Gregg B.  
; APPLICANT: Harley, Calvin B.  
; APPLICANT: Andrews, William H.

; TITLE OF INVENTION: Human Telomerase Catalytic Subunit  
; NUMBER OF SEQUENCES: 727  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Townsend and Crew LLP  
; STREET: Two Embarcadero Center, Eighth Floor  
; CITY: San Francisco  
; STATE: California  
; COUNTRY: USA  
; ZIP: 94111-3834  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/974,549A  
; FILING DATE: 19-NOV-1997  
; CLASSIFICATION: 536  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/724,643  
; FILING DATE: 01-OCT-1996  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/844,419  
; FILING DATE: 18-APR-1997  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/846,017  
; FILING DATE: 25-APR-1997  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/851,843  
; FILING DATE: 06-MAY-1997  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/854,050  
; FILING DATE: 09-MAY-1997  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/911,312  
; FILING DATE: 14-AUG-1997  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/912,951  
; FILING DATE: 14-AUG-1997  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/915,503  
; FILING DATE: 14-AUG-1997  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: WO PCT/US97/17618  
; FILING DATE: 01-OCT-1997  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: WO PCT/US97/17885  
; FILING DATE: 01-OCT-1997  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Apple, Randolph Ted  
; REGISTRATION NUMBER: 36,429  
; REFERENCE/DOCKET NUMBER: 015389-002610US  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (415) 576-0200  
; TELEFAX: (415) 576-0300  
; INFORMATION FOR SEQ ID NO: 543:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 18 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: DNA  
; FEATURE:  
; NAME/KEY: -  
; LOCATION: 1..18  
; OTHER INFORMATION: /note= "antisense hTERT molecule"  
US-08-974-549A-543

Query Match 3.6%; Score 16.4; DB 1; Length 18;  
Best Local Similarity 94.4%; Pred. No. 1.4e+02;  
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Oy 149 CACGTTTCATTCTAGAGC 166

Db 18 CACCCCTTCATTCTAGAGC 1

Query Match 3.6%; Score 16.4; DB 1; Length 18;  
Best Local Similarity 94.4%; Pred. No. 1.4e+02;  
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

RESULT 157  
US-09-402-181B-543/C  
; Sequence 543, Application US/09402181B  
; Patent No. 6610839  
; GENERAL INFORMATION:  
; APPLICANT: Cech, Thomas R.  
; Lingner, Joachim  
; Nakamura, Toru  
; Chapman, Karen B.  
; Morin, Gregg B.  
; Harley, Calvin B.  
; Andrews, William H.  
; TITLE OF INVENTION: Human Telomerase Catalytic Subunit  
; NUMBER OF SEQUENCES: 633  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Townsend and Townsend and Crew LLP  
; STREET: Two Embarcadero Center, Eighth Floor  
; CITY: San Francisco  
; STATE: California  
; COUNTRY: USA  
; ZIP: 94111-3834  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patent In Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/09/402,181B  
; FILING DATE: 29-Sep-1997  
; CLASSIFICATION: <Unknown>  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/724,643  
; FILING DATE: 01-OCT-1996  
; APPLICATION NUMBER: US 08/844,419  
; FILING DATE: 18-APR-1997  
; APPLICATION NUMBER: US 08/846,017  
; FILING DATE: 25-APR-1997  
; APPLICATION NUMBER: US 08/851,843  
; FILING DATE: 06-MAY-1997  
; APPLICATION NUMBER: US 08/854,050  
; FILING DATE: 09-MAY-1997  
; APPLICATION NUMBER: US 08/911,312  
; FILING DATE: 14-AUG-1997  
; APPLICATION NUMBER: US 08/912,951  
; FILING DATE: 14-AUG-1997  
; APPLICATION NUMBER: US 08/915,503  
; FILING DATE: 14-AUG-1997  
; APPLICATION NUMBER: WO PCT/US97/17885  
; FILING DATE: 01-OCT-1997  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Ausenhus, Scott L.  
; REGISTRATION NUMBER: 42,271  
; REFERENCE/DOCKET NUMBER: 015389-002620US  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (415) 576-0200  
; TELEFAX: (415) 576-0300  
; INFORMATION FOR SEQ ID NO: 543:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 18 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: DNA  
; FEATURE:  
; NAME/KEY: -  
; LOCATION: 1..18  
; OTHER INFORMATION: /note= "antisense hTRT molecule"  
; SEQUENCE DESCRIPTION: SEQ ID NO: 543:  
US-09-402-181B-543

Qy 149 CACCGTTCATTCTAGAGC 166  
Db 18 CACCCCTTCATTCTAGAGC 1

RESULT 158  
US-09-721-456-543/C  
; Sequence 543, Application US/09721456  
; Patent No. 6617110  
; GENERAL INFORMATION:  
; APPLICANT: Cech, Thomas R.  
; Lingner, Joachim  
; Nakamura, Toru  
; Chapman, Karen B.  
; Morin, Gregg B.  
; Harley, Calvin B.  
; Andrews, William H.  
; TITLE OF INVENTION: Human Telomerase Catalytic Subunit  
; NUMBER OF SEQUENCES: 727  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Townsend and Townsend and Crew LLP  
; STREET: Two Embarcadero Center, Eighth Floor  
; CITY: San Francisco  
; STATE: California  
; COUNTRY: USA  
; ZIP: 94111-3834  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patent In Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/09/721,456  
; FILING DATE: 22-No. 6617110-2000  
; CLASSIFICATION: <Unknown>  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/974,549A  
; FILING DATE: 19-NOV-1997  
; APPLICATION NUMBER: US 08/724,643  
; FILING DATE: 01-OCT-1996  
; APPLICATION NUMBER: US 08/844,419  
; FILING DATE: 18-APR-1997  
; APPLICATION NUMBER: US 08/846,017  
; FILING DATE: 25-APR-1997  
; APPLICATION NUMBER: US 08/851,843  
; FILING DATE: 06-MAY-1997  
; APPLICATION NUMBER: US 08/854,050  
; FILING DATE: 09-MAY-1997  
; APPLICATION NUMBER: US 08/911,312  
; FILING DATE: 14-AUG-1997  
; APPLICATION NUMBER: US 08/912,951  
; FILING DATE: 14-AUG-1997  
; APPLICATION NUMBER: US 08/915,503  
; FILING DATE: 14-AUG-1997  
; APPLICATION NUMBER: WO PCT/US97/17618  
; FILING DATE: 01-OCT-1997  
; APPLICATION NUMBER: WO PCT/US97/17885  
; FILING DATE: 01-OCT-1997  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Apple, Randolph Ted  
; REGISTRATION NUMBER: 36,429  
; REFERENCE/DOCKET NUMBER: 015389-002610US  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (415) 576-0200  
; TELEFAX: (415) 576-0300  
; INFORMATION FOR SEQ ID NO: 543:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 18 base pairs



;  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: DNA  
; FEATURE:  
; NAME/KEY: -  
; LOCATION: 1..18  
; OTHER INFORMATION: /note= "antisense hTRT molecule"  
; SEQUENCE DESCRIPTION: SEQ ID NO: 543:  
US-09-721-456-543

Query Match 3.6%; Score 16.4; DB 1; Length 18;  
Best Local Similarity 94.4%; Pred. No. 1.4e+02;  
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 149 CACCGTTTCATTCTAGAGC 166  
Db 18 CACCCCTTCATTCTAGAGC 1

RESULT 159  
US-08-026-143B-13  
; Sequence 13, Application US/08026143B  
; Patent No. 6348327  
; GENERAL INFORMATION:  
; APPLICANT: Gorman, Cornelia M.,  
; Groskreutz, Debyra J.  
; TITLE OF INVENTION: Prohormone Convertase Transformed Cells and  
; Polypeptide Synthesis  
; NUMBER OF SEQUENCES: 57  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Genentech, Inc.  
; STREET: 1 DNA Way  
; CITY: South San Francisco  
; STATE: California  
; COUNTRY: USA  
; ZIP: 94080

COMPUTER READABLE FORM:  
MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: WinPatIn (Genentech)

CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/026.143B  
FILING DATE: 01-Mar-1993

CLASSIFICATION: <Unknown>

PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 07/887265

FILING DATE: 22-MAY-1992

APPLICATION NUMBER: 07/803631

FILING DATE: 06-DEC-1992

APPLICATION NUMBER: PCT/US92/10621

FILING DATE: 04-DEC-1992

ATTORNEY/AGENT INFORMATION:  
NAME: Love, Richard B.

REGISTRATION NUMBER: 34,659

REFERENCE/DOCKET NUMBER: P0748P3

TELEPHONE: 650/225-5530

TELEFAX: 650/952-9881

INFORMATION FOR SEQ ID NO: 13:  
SEQUENCE CHARACTERISTICS:

LENGTH: 21 base pairs

TYPE: Nucleic Acid

STRANDEDNESS: Single

TOPOLOGY: Linear

SEQUENCE DESCRIPTION: SEQ ID NO: 13:

US-08-026-143B-13  
Query Match 3.6%; Score 16.2; DB 1; Length 21;  
Best Local Similarity 85.7%; Pred. No. 1.6e+02;  
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 156 CATTCTAGAGCAAAACAAAAA 176  
Db 1 CATTCTAGAGCAAAAGAGACAA 21

## RESULT 160

PCT-US92-10621-13  
; Sequence 13, Application PC/TUS9210621

GENERAL INFORMATION:

APPLICANT: Genentech, Inc.

APPLICANT: Gorman, Cornelia M.,

APPLICANT: Marriot, Dave,

APPLICANT: Groskreutz Debyra J.

TITLE OF INVENTION: Prohormone Convertase Transformed Cells and

Polypeptide Synthesis

NUMBER OF SEQUENCES: 54

CORRESPONDENCE ADDRESS:

ADDRESSEE: Genentech, Inc.

STREET: 460 Point San Bruno Blvd

CITY: South San Francisco

STATE: California

COUNTRY: USA

ZIP: 94080

COMPUTER READABLE FORM:

MEDIUM TYPE: 5.25 inch, 360 Kb floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: patin (Genentech)

CURRENT APPLICATION DATA:

APPLICATION NUMBER: PCT/US92/10621

FILING DATE: 19921204

CLASSIFICATION:

PRIOR APPLICATION DATA:

APPLICATION NUMBER: 07/887265

FILING DATE: 22-MAY-1992

PRIOR APPLICATION DATA:

APPLICATION NUMBER: 07/803631

FILING DATE: 06-DEC-1992

ATTORNEY/AGENT INFORMATION:

NAME: Adler, Carolyn R.

REGISTRATION NUMBER: 32,324

REFERENCE/DOCKET NUMBER: 748P2.PCT

TELECOMMUNICATION INFORMATION:

TELEPHONE: 415/225-2614

TELEFAX: 415/952-9881

INFORMATION FOR SEQ ID NO: 13:

SEQUENCE CHARACTERISTICS:

LENGTH: 21 bases

TYPE: NUCLEIC ACID

STRANDEDNESS: single

TOPOLOGY: linear

PCT-US92-10621-13

Query Match 3.6%; Score 16.2; DB 1; Length 21;

Best Local Similarity 85.7%; Pred. No. 1.6e+02;  
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 156 CATTCTAGAGCAAAACAAAAA 176  
Db 1 CATTCTAGAGCAAAAGAGACAA 21

## RESULT 161

PCT-US94-02233-13  
; Sequence 13, Application PC/TUS9402233

GENERAL INFORMATION:

APPLICANT: Genentech, Inc.

TITLE OF INVENTION: Prohormone Convertase Transformed Cells and

Polypeptide Synthesis

NUMBER OF SEQUENCES: 54

CORRESPONDENCE ADDRESS:

ADDRESSEE: Genentech, Inc.

STREET: 460 Point San Bruno Blvd

CITY: South San Francisco

```
; STATE: California
; COUNTRY: USA
; ZIP: 94080
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 5.25 inch, 360 Kb floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: patin (Genentech)
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: PCT/US94/02233
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER:
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: Love, Richard B.
; REGISTRATION NUMBER: 34,659
; REFERENCE/DOCKET NUMBER: 748P3PCT
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 415/225-5530
; TELEFAX: 415/952-9881
; TELEX: 910/371-7168
; INFORMATION FOR SEQ ID NO: 13:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 21 bases
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; PCT-US94-02233-13

Query Match 3.6%; Score 16.2; DB 1; Length 21;
Best Local Similarity 85.7%; Pred. No. 1.6e+02;
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 156 CATTCTAGAGCAAAACAAAAA 176
Db 1 CATTCTAGAGCAAAAGAGACAA 21

RESULT 162
US-08-838-545-27
; Sequence 27, Application US/08838545
; Patent No. 6046307
; GENERAL INFORMATION:
; APPLICANT: Shay, Jerry W.
; APPLICANT: Wright, Woodring E.
; APPLICANT: Piatyszek, Mieczyslaw A.
; APPLICANT: Corey, David R.
; TITLE OF INVENTION: Modulation of Mammalian Telomerase by
; TITLE OF INVENTION: Peptide Nucleic Acids
; NUMBER OF SEQUENCES: 60
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US 08/838,545
; FILING DATE: 09-APR-1997
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/838,545
; FILING DATE: 09-APR-1997
; ATTORNEY/AGENT INFORMATION:
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-001610US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0300
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 27:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 16 base pairs
; TYPE: nucleic acid

; STATE: California
; COUNTRY: USA
; ZIP: 94080
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 5.25 inch, 360 Kb floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: patin (Genentech)
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: PCT/US94/02233
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER:
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-001610US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0300
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 27:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 16 base pairs
; TYPE: nucleic acid

; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-001610US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0300
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 27:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 16 base pairs
; TYPE: nucleic acid

Query Match 3.5%; Score 16; DB 1; Length 16;
Best Local Similarity 100.0%; Pred. No. 1.3e+02;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 53 TAACTGAGAAGGCGGT 68
Db 1 TAACTGAGAAGGCGGT 16

RESULT 163
US-09-349-532-27
; Sequence 27, Application US/09349532
; Patent No. 6294650
; GENERAL INFORMATION:
; APPLICANT: Shay, Jerry W.
; APPLICANT: Wright, Woodring E.
; APPLICANT: Piatyszek, Mieczyslaw A.
; APPLICANT: Corey, David R.
; APPLICANT: No. 6294650ton, James C.
; TITLE OF INVENTION: Modulation of Mammalian Telomerase by
; TITLE OF INVENTION: Peptide Nucleic Acids
; NUMBER OF SEQUENCES: 60
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/349,532
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/838,545
; FILING DATE: 09-APR-1997
; APPLICATION NUMBER: US 08/630,019
; FILING DATE: 09-APR-1996
; ATTORNEY/AGENT INFORMATION:
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-001610US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0300
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 27:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 16 base pairs
; TYPE: nucleic acid
```

```
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: other nucleic acid
; DESCRIPTION: /desc = "peptide nucleic acid (PNA),
; DESCRIPTION: where (deoxy(ribose-phosphate linkages are replaced by
; DESCRIPTION: N-(2-aminoethyl)glycine units linked to nucleotide bases via
; DESCRIPTION: glycine amino N through a methylenecarbonyl linker"
US-09-349-532-27

Query Match      3.5%; Score 16; DB 1; Length 16;
Best Local Similarity 100.0%; Pred. No. 1.3e+02;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 53 TAACTGAGAGGGCGT 68
Db 1 TAACTGAGAGGGCGT 16

RESULT 164
US-09-345-882-76
; Sequence 76, Application US/09345882
; Patent No. 6399373
; GENERAL INFORMATION:
; APPLICANT: Bougueleret, Lydie
; TITLE OF INVENTION: A NUCLEIC ACID ENCODING A RETINOBLASTOMA BINDING PROTEIN (RBP-7)
; FILE REFERENCE: GENSET.031A
; CURRENT APPLICATION NUMBER: US/09/345,882
; CURRENT FILING DATE: 1999-06-30
; PRIOR APPLICATION NUMBER: US 60/091,315
; PRIOR FILING DATE: 1998-06-30
; PRIOR APPLICATION NUMBER: US 60/111,909
; PRIOR FILING DATE: 1998-12-10
; NUMBER OF SEQ ID NOS: 140
; SOFTWARE: Patent.pm
; SEQ ID NO 76
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; NAME/KEY: primer_bind
; LOCATION: 1..20
; OTHER INFORMATION: upstream amplification primer for SEQ 34, SEQ 55, SEQ 35, SEQ 56
US-09-345-882-76

Query Match      3.4%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 1.7e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 166 CAAACAAAAAATGTCAG 182
Db 1 CAAACAATAAATGTCAG 17

RESULT 165
US-09-596-938-11
; Sequence 11, Application US/09596938
; Patent No. 6355481
; GENERAL INFORMATION:
; APPLICANT: Li, Xiao-Jiang
; TITLE OF INVENTION: Huntington Disease Cellular Model:
; TITLE OF INVENTION: Stably Transfected PC12 Cells Expressing Mutant Huntingtin
; FILE REFERENCE: 5543-14
; CURRENT APPLICATION NUMBER: US/09/596,938
; CURRENT FILING DATE: 2000-06-19
; PRIOR APPLICATION NUMBER: 60/140,018
; PRIOR FILING DATE: 1999-06-18
; NUMBER OF SEQ ID NOS: 15
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 11
; LENGTH: 20
; TYPE: DNA
```

```
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: PCR primer
US-09-596-938-11

Query Match      3.4%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 1.8e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 313 CTGTCAGCCGCGGTCTCTC 332
Db 1 CTGTCGACACGGGTTTCTC 20

RESULT 166
US-08-770-565-10/c
; Sequence 10, Application US/08770565
; Patent No. 5846723
; GENERAL INFORMATION:
; APPLICANT: Kim, Nam Woo
; APPLICANT: Wu, Fred
; APPLICANT: Kealey, James T.
; APPLICANT: Pruzan, Ronald
; APPLICANT: Weinrich, Scott L.
; TITLE OF INVENTION: Methods for Detecting the RNA Component of
; TITLE OF INVENTION: Telomerase
; NUMBER OF SEQUENCES: 26
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: TOWNSEND and TOWNSEND and CREW LLP
; STREET: Two Embarcadero Center, 8th Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/770,565
; FILING DATE: 20-DEC-1996
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-0023000US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 415-576-0200
; TELEFAX: 415-576-0300
; INFORMATION FOR SEQ ID NO: 10:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 15 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
US-08-770-565-10

Query Match      3.3%; Score 15; DB 1; Length 15;
Best Local Similarity 100.0%; Pred. No. 1.4e+02;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 152 CGTTTCATTCCTAGAGC 166
Db 15 CGTTTCATTCCTAGAGC 1

RESULT 167
US-08-630-019A-12/c
; Sequence 12, Application US/08630019A
; Patent No. 6015710
; GENERAL INFORMATION:
```

; APPLICANT: Shay, Jerry W.  
; APPLICANT: Wright, Woodring E.  
; APPLICANT: Piatyszek, Mieczyslaw A.  
; APPLICANT: Corey, David  
; APPLICANT: No. 6015710ton, James C.  
; TITLE OF INVENTION: Modulation of Mammalian Telomerase by  
; TITLE OF INVENTION: Peptide Nucleic Acids  
; NUMBER OF SEQUENCES: 46  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Townsend and Townsend and Crew LLP  
; STREET: Two Embarcadero Center, Eighth Floor  
; CITY: San Francisco  
; STATE: California  
; COUNTRY: USA  
; ZIP: 94111-3834  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/630,019A  
; FILING DATE: 09-JUN-1996  
; CLASSIFICATION: 536  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Storella, John R.  
; REGISTRATION NUMBER: 32,944  
; REFERENCE/DOCKET NUMBER: 015389-001600US  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (415) 576-0200  
; TELEFAX: (415) 576-0300  
; INFORMATION FOR SEQ ID NO: 12:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 15 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: other nucleic acid  
; DESCRIPTION: /desc = "peptide nucleic acid (PNA),  
; DESCRIPTION: where (deoxy)ribose-phosphate linkages are replaced by  
; DESCRIPTION: N-(2-aminoethyl)glycine units linked to nucleotide bases via  
; DESCRIPTION: glycine amino nitrogen through a methylenecarbonyl linker"  
US-08-630-019A-12

Query Match 3.3%; Score 15; DB 1; Length 15;  
Best Local Similarity 100.0%; Pred. No. 1.4e+02;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 46 CTAACCCCTAAGTGA 60  
| | | | | | | | | | | | | | | | | | | | | |  
Db 15 CTAACCCCTAAGTGA 1

RESULT 168  
US-08-630-019A-18/c  
; Sequence 18, Application US/08630019A  
; Patent No. 6015710  
; GENERAL INFORMATION:  
; APPLICANT: Shay, Jerry W.  
; APPLICANT: Wright, Woodring E.  
; APPLICANT: Piatyszek, Mieczyslaw A.  
; APPLICANT: Corey, David  
; APPLICANT: No. 6015710ton, James C.  
; TITLE OF INVENTION: Modulation of Mammalian Telomerase by  
; TITLE OF INVENTION: Peptide Nucleic Acids  
; NUMBER OF SEQUENCES: 46  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Townsend and Townsend and Crew LLP  
; STREET: Two Embarcadero Center, Eighth Floor  
; CITY: San Francisco  
; STATE: California  
; COUNTRY: USA  
; ZIP: 94111-3834

; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/630,019A  
; FILING DATE: 09-JUN-1996  
; CLASSIFICATION: 536  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Storella, John R.  
; REGISTRATION NUMBER: 32,944  
; REFERENCE/DOCKET NUMBER: 015389-001600US  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (415) 576-0200  
; TELEFAX: (415) 576-0300  
; INFORMATION FOR SEQ ID NO: 18:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 15 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: other nucleic acid  
; DESCRIPTION: /desc = "peptide nucleic acid (PNA),  
; DESCRIPTION: where (deoxy)ribose-phosphate linkages are replaced by  
; DESCRIPTION: N-(2-aminoethyl)glycine units linked to nucleotide bases via  
; DESCRIPTION: glycine amino nitrogen through a methylenecarbonyl linker"  
US-08-630-019A-18

Query Match 3.3%; Score 15; DB 1; Length 15;  
Best Local Similarity 100.0%; Pred. No. 1.4e+02;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 42 TTGTCTAACCCCTAAC 56  
| | | | | | | | | | | | | | | | | | | | | |  
Db 15 TTGTCTAACCCCTAAC 1

RESULT 169  
US-08-630-019A-40/c  
; Sequence 40, Application US/08630019A  
; Patent No. 6015710  
; GENERAL INFORMATION:  
; APPLICANT: Shay, Jerry W.  
; APPLICANT: Wright, Woodring E.  
; APPLICANT: Piatyszek, Mieczyslaw A.  
; APPLICANT: Corey, David  
; APPLICANT: No. 6015710ton, James C.  
; TITLE OF INVENTION: Modulation of Mammalian Telomerase by  
; TITLE OF INVENTION: Peptide Nucleic Acids  
; NUMBER OF SEQUENCES: 46  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Townsend and Townsend and Crew LLP  
; STREET: Two Embarcadero Center, Eighth Floor  
; CITY: San Francisco  
; STATE: California  
; COUNTRY: USA  
; ZIP: 94111-3834  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/630,019A  
; FILING DATE: 09-JUN-1996  
; CLASSIFICATION: 536  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Storella, John R.  
; REGISTRATION NUMBER: 32,944  
; REFERENCE/DOCKET NUMBER: 015389-001600US  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (415) 576-0200

; TELEFAX: (415) 576-0300  
; INFORMATION FOR SEQ ID NO: 40:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 15 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: other nucleic acid  
; DESCRIPTION: /desc = "phosphorothioate (PS) nucleic acid"  
US-08-630-019A-40

Query Match 3.3%; Score 15; DB 1; Length 15;  
Best Local Similarity 100.0%; Pred. No. 1.4e+02;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 46 CTAACCCCTAACTGAG 60  
| | | | | | | | | | | | | | |  
Db 15 CTAACCCCTAACTGAG 1

RESULT 170  
US-08-838-545-2/c  
; Sequence 2, Application US/08838545  
; Patent No. 6046307  
; GENERAL INFORMATION:  
; APPLICANT: Shay, Jerry W.  
; APPLICANT: Wright, Woodring E.  
; APPLICANT: Piatyszek, Mieczyslaw A.  
; APPLICANT: Corey, David R.  
; APPLICANT: No. 6046307ton, James C.  
; TITLE OF INVENTION: Modulation of Mammalian Telomerase by  
; TITLE OF INVENTION: Peptide Nucleic Acids  
; NUMBER OF SEQUENCES: 60  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Townsend and Townsend and Crew LLP  
; STREET: Two Embarcadero Center, Eighth Floor  
; CITY: San Francisco  
; STATE: California  
; COUNTRY: USA  
; ZIP: 94111-3834  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/838,545  
; FILING DATE: 09-APR-1997  
; CLASSIFICATION: 536  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/630,019  
; FILING DATE: 09-APR-1996  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Storella, John R.  
; REGISTRATION NUMBER: 32,944  
; REFERENCE/DOCKET NUMBER: 015389-001610US  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (415) 576-0200  
; TELEFAX: (415) 576-0300  
; INFORMATION FOR SEQ ID NO: 2:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 15 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: other nucleic acid  
; DESCRIPTION: /desc = "peptide nucleic acid (PNA),  
; DESCRIPTION: where (deoxy(ribose-phosphate linkages are replaced by  
; DESCRIPTION: N-(2-aminoethyl)glycine units linked to nucleotide bases via  
; DESCRIPTION: glycine amino N through a methylenecarbonyl linker"  
US-08-838-545-2

Query Match 3.3%; Score 15; DB 1; Length 15;

Best Local Similarity 100.0%; Pred. No. 1.4e+02;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Qy 46 CTAACCCCTAACTGAG 60  
| | | | | | | | | | | | | | |  
Db 15 CTAACCCCTAACTGAG 1

RESULT 171  
US-08-838-545-5/c  
; Sequence 5, Application US/08838545  
; Patent No. 6046307  
; GENERAL INFORMATION:  
; APPLICANT: Shay, Jerry W.  
; APPLICANT: Wright, Woodring E.  
; APPLICANT: Piatyszek, Mieczyslaw A.  
; APPLICANT: Corey, David R.  
; APPLICANT: No. 6046307ton, James C.  
; TITLE OF INVENTION: Modulation of Mammalian Telomerase by  
; TITLE OF INVENTION: Peptide Nucleic Acids  
; NUMBER OF SEQUENCES: 60  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Townsend and Townsend and Crew LLP  
; STREET: Two Embarcadero Center, Eighth Floor  
; CITY: San Francisco  
; STATE: California  
; COUNTRY: USA  
; ZIP: 94111-3834  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/838,545  
; FILING DATE: 09-APR-1997  
; CLASSIFICATION: 536  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/630,019  
; FILING DATE: 09-APR-1996  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Storella, John R.  
; REGISTRATION NUMBER: 32,944  
; REFERENCE/DOCKET NUMBER: 015389-001610US  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (415) 576-0200  
; TELEFAX: (415) 576-0300  
; INFORMATION FOR SEQ ID NO: 5:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 15 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: other nucleic acid  
; DESCRIPTION: /desc = "peptide nucleic acid (PNA),  
; DESCRIPTION: where (deoxy(ribose-phosphate linkages are replaced by  
; DESCRIPTION: N-(2-aminoethyl)glycine units linked to nucleotide bases via  
; DESCRIPTION: glycine amino N through a methylenecarbonyl linker"  
US-08-838-545-5

Query Match 3.3%; Score 15; DB 1; Length 15;  
Best Local Similarity 100.0%; Pred. No. 1.4e+02;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 42 TTGCTAACCCCTAAC 56  
| | | | | | | | | | | | | | |  
Db 15 TTGCTAACCCCTAAC 1

RESULT 172  
US-08-838-545-28  
; Sequence 28, Application US/08838545  
; Patent No. 6046307

```
;
; GENERAL INFORMATION:
; APPLICANT: Shay, Jerry W.
; APPLICANT: Wright, Woodring E.
; APPLICANT: Piatyszek, Mieczyslaw A.
; APPLICANT: Corey, David R.
; APPLICANT: No. 6046307ton, James C.
; TITLE OF INVENTION: Modulation of Mammalian Telomerase by
; NUMBER OF SEQUENCES: 60
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/838,545
; FILING DATE: 09-APR-1997
; CLASSIFICATION: 536
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/630,019
; FILING DATE: 09-APR-1996
; ATTORNEY/AGENT INFORMATION:
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-001610US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 28:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 15 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: other nucleic acid (PNA),
; DESCRIPTION: /desc = "peptide nucleic acid (PNA),
; DESCRIPTION: where (deoxy(ribose-phosphate linkages are replaced by
; DESCRIPTION: N-(2-aminoethyl)glycine units linked to nucleotide bases via
; DESCRIPTION: glycine amino N through a methylenecarbonyl linker"
; US-08-838-545-28

Query Match 3.3%; Score 15; DB 1; Length 15;
Best Local Similarity 100.0%; Pred. No. 1.4e+02;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 49 ACCCTAACTGAGAAG 63
Db 1 ACCCTAACTGAGAAG 15
|||||
RESULT 173
US-08-838-545-45/c
; Sequence 45, Application US/08838545
; Patent No. 6046307
; GENERAL INFORMATION:
; APPLICANT: Shay, Jerry W.
; APPLICANT: Wright, Woodring E.
; APPLICANT: Piatyszek, Mieczyslaw A.
; APPLICANT: Corey, David R.
; APPLICANT: No. 6046307ton, James C.
; TITLE OF INVENTION: Modulation of Mammalian Telomerase by
; NUMBER OF SEQUENCES: 60
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
```

```
;
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/838,545
; FILING DATE: 09-APR-1997
; CLASSIFICATION: 536
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/630,019
; FILING DATE: 09-APR-1996
; ATTORNEY/AGENT INFORMATION:
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-001610US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 45:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 15 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: other nucleic acid
; DESCRIPTION: /desc = "phosphorothioate (PS)
; DESCRIPTION: nucleic acid"
; US-08-838-545-45

Query Match 3.3%; Score 15; DB 1; Length 15;
Best Local Similarity 100.0%; Pred. No. 1.4e+02;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 46 CTAACCCCTAACTGAG 60
Db 15 CTAACCCCTAACTGAG 1
|||||
RESULT 174
US-09-349-532-2/c
; Sequence 2, Application US/09349532
; Patent No. 6294650
; GENERAL INFORMATION:
; APPLICANT: Shay, Jerry W.
; APPLICANT: Wright, Woodring E.
; APPLICANT: Piatyszek, Mieczyslaw A.
; APPLICANT: Corey, David R.
; APPLICANT: No. 6294650ton, James C.
; TITLE OF INVENTION: Modulation of Mammalian Telomerase by
; NUMBER OF SEQUENCES: 60
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/349,532
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
```

APPLICATION NUMBER: US 08/838,545  
FILING DATE: 09-APR-1997  
APPLICATION NUMBER: US 08/630,019  
FILING DATE: 09-APR-1996  
ATTORNEY/AGENT INFORMATION:  
NAME: Storella, John R.  
REGISTRATION NUMBER: 32,944  
REFERENCE/DOCKET NUMBER: 015389-001610US  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (415) 576-0200  
TELEFAX: (415) 576-0300  
INFORMATION FOR SEQ ID NO: 2:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 15 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: other nucleic acid  
DESCRIPTION: /desc = "peptide nucleic acid (PNA),  
where (deoxy(ribose-phosphate linkages are replaced by  
N-(2-aminoethyl)glycine units linked to nucleotide bases via  
glycine amino N through a methylenecarbonyl linker"  
US-09-349-532-2

Query Match 3.3%; Score 15; DB 1; Length 15;  
Best Local Similarity 100.0%; Pred. No. 1.4e+02;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 46 CTAACCTTAACCTGAG 60  
Db 15 CTAACCTTAACCTGAG 1  
|||||

RESULT 175  
US-09-349-532-5/c  
Sequence 5, Application US/09349532  
Patent No. 6294650  
GENERAL INFORMATION:  
APPLICANT: Shay, Jerry W.  
APPLICANT: Wright, Woodring E.  
APPLICANT: Piatyszek, Mieczyslaw A.  
APPLICANT: Corey, David R.  
APPLICANT: No. 6294650ton, James C.  
TITLE OF INVENTION: Modulation of Mammalian Telomerase by  
NUMBER OF SEQUENCES: 60  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Townsend and Townsend and Crew LLP  
STREET: Two Embarcadero Center, Eighth Floor  
CITY: San Francisco  
STATE: California  
COUNTRY: USA  
ZIP: 94111-3834  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
FILING DATE:  
CLASSIFICATION:  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/838,545  
FILING DATE: 09-APR-1997  
APPLICATION NUMBER: US 08/630,019  
FILING DATE: 09-APR-1996  
ATTORNEY/AGENT INFORMATION:  
NAME: Storella, John R.  
REGISTRATION NUMBER: 32,944  
REFERENCE/DOCKET NUMBER: 015389-001610US  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (415) 576-0200  
TELEFAX: (415) 576-0300  
INFORMATION FOR SEQ ID NO: 2:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 15 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: other nucleic acid  
DESCRIPTION: /desc = "peptide nucleic acid (PNA),  
where (deoxy(ribose-phosphate linkages are replaced by  
N-(2-aminoethyl)glycine units linked to nucleotide bases via  
glycine amino N through a methylenecarbonyl linker"  
US-09-349-532-2

TELEFAX: (415) 576-0300  
INFORMATION FOR SEQ ID NO: 5:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 15 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: other nucleic acid  
DESCRIPTION: /desc = "peptide nucleic acid (PNA),  
where (deoxy(ribose-phosphate linkages are replaced by  
N-(2-aminoethyl)glycine units linked to nucleotide bases via  
glycine amino N through a methylenecarbonyl linker"  
US-09-349-532-5

Query Match 3.3%; Score 15; DB 1; Length 15;  
Best Local Similarity 100.0%; Pred. No. 1.4e+02;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 42 TTGCTTAACCTTAAC 56  
Db 15 TTGCTTAACCTTAAC 1  
|||||

RESULT 176  
US-09-349-532-28  
Sequence 28, Application US/09349532  
Patent No. 6294650  
GENERAL INFORMATION:  
APPLICANT: Shay, Jerry W.  
APPLICANT: Wright, Woodring E.  
APPLICANT: Piatyszek, Mieczyslaw A.  
APPLICANT: Corey, David R.  
APPLICANT: No. 6294650ton, James C.  
TITLE OF INVENTION: Modulation of Mammalian Telomerase by  
NUMBER OF SEQUENCES: 60  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Townsend and Townsend and Crew LLP  
STREET: Two Embarcadero Center, Eighth Floor  
CITY: San Francisco  
STATE: California  
COUNTRY: USA  
ZIP: 94111-3834  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
FILING DATE:  
CLASSIFICATION:  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/838,545  
FILING DATE: 09-APR-1997  
APPLICATION NUMBER: US 08/630,019  
FILING DATE: 09-APR-1996  
ATTORNEY/AGENT INFORMATION:  
NAME: Storella, John R.  
REGISTRATION NUMBER: 32,944  
REFERENCE/DOCKET NUMBER: 015389-001610US  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (415) 576-0200  
TELEFAX: (415) 576-0300  
INFORMATION FOR SEQ ID NO: 28:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 15 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: other nucleic acid  
DESCRIPTION: /desc = "peptide nucleic acid (PNA),  
where (deoxy(ribose-phosphate linkages are replaced by  
N-(2-aminoethyl)glycine units linked to nucleotide bases via  
glycine amino N through a methylenecarbonyl linker"  
US-09-349-532-28

; DESCRIPTION: N-(2-aminoethyl)glycine units linked to nucleotide bases via  
; DESCRIPTION: glycine amino N through a methylenecarbonyl linker"  
US-09-349-532-28

Query Match 3.3%; Score 15; DB 1; Length 15;  
Best Local Similarity 100.0%; Pred. No. 1.4e+02;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 49 ACCCTAACTGAGAAG 63

Db 1 ACCCTAACTGAGAAG 15

## RESULT 177

US-09-349-532-45/c  
; Sequence 45, Application US/09349532  
; Patent No. 6294650  
; GENERAL INFORMATION:  
; APPLICANT: Shay, Jerry W.  
; APPLICANT: Wright, Woodring E.  
; APPLICANT: Piatyszek, Mieczyslaw A.  
; APPLICANT: Corey, David R.  
; APPLICANT: No. 6294650ton, James C.  
; TITLE OF INVENTION: Modulation of Mammalian Telomerase by  
; TITLE OF INVENTION: Peptide Nucleic Acids  
; NUMBER OF SEQUENCES: 60  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Townsend and Townsend and Crew LLP  
; STREET: Two Embarcadero Center, Eighth Floor  
; CITY: San Francisco  
; STATE: California  
; COUNTRY: USA  
; ZIP: 94111-3834  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/09/349,532  
; FILING DATE:  
; CLASSIFICATION:  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/838,545  
; FILING DATE: 09-APR-1997  
; APPLICATION NUMBER: US 08/630,019  
; FILING DATE: 09-APR-1996  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Storella, John R.  
; REGISTRATION NUMBER: 32,944  
; REFERENCE/DOCKET NUMBER: 015389-001610US  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (415) 576-0200  
; TELEFAX: (415) 576-0300  
; INFORMATION FOR SEQ ID NO: 45:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 15 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: other nucleic acid  
; DESCRIPTION: /desc = "phosphorothioate (PS)  
; DESCRIPTION: nucleic acid"

Query Match 3.3%; Score 15; DB 1; Length 15;  
Best Local Similarity 100.0%; Pred. No. 1.4e+02;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 46 CTAACCCCTAACTGAG 60

Db 15 CTAACCCCTAACTGAG 1

RESULT 178  
US-09-673-298-4/c  
; Sequence 4, Application US/09673298  
; Patent No. 6469156  
; GENERAL INFORMATION:  
; APPLICANT: THE GOVERNMENT OF THE UNITED STATES OF AMERICA, AS  
; APPLICANT: REPRESENTED BY THE SECRETARY OF THE DEPARTMENT OF  
; APPLICANT: HEALTH AND HUMAN SERVICES CENTERS FOR DISEASE  
; APPLICANT: CONTROL AND PREVENTION  
; APPLICANT: SCHAFER, MILLIE P.  
; APPLICANT: REID, THOMAS M.

; TITLE OF INVENTION: RAPID AND SENSITIVE METHOD FOR DETECTING  
; TITLE OF INVENTION: HISTOPLASMA CAPSULATUM  
; FILE REFERENCE: 62951 / PCT  
; CURRENT APPLICATION NUMBER: US/09/673,298  
; CURRENT FILING DATE: 2000-10-12  
; PRIOR APPLICATION NUMBER: U.S. 60/082,477  
; PRIOR FILING DATE: 1998-04-21  
; NUMBER OF SEQ ID NOS: 4  
; SOFTWARE: FastSEQ for Windows Version 3.0  
; SEQ ID NO 4  
; LENGTH: 18  
; TYPE: DNA  
; ORGANISM: UNKNOWN  
; FEATURE:  
; OTHER INFORMATION: PRIMER  
US-09-673-298-4

Query Match 3.3%; Score 14.8; DB 1; Length 18;  
Best Local Similarity 88.9%; Pred. No. 1.7e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 410 CTGAGCTGTGGACGTGC 427

Db 18 CTGACCGTGGACGTGC 1

## RESULT 179

US-08-392-818-22  
; Sequence 22, Application US/08392818  
; Patent No. 5688643  
; GENERAL INFORMATION:  
; APPLICANT: Oka, Takanori  
; APPLICANT: Matsunaga, Hironari  
; APPLICANT: Yamane, Akio  
; TITLE OF INVENTION: METHOD OF NUCLEIC ACID-DIFFERENTIATION  
; TITLE OF INVENTION: AND ASSAY KIT FOR NUCLEIC ACID-DIFFERENTIATION  
; NUMBER OF SEQUENCES: 24  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Birch, Stewart, Kolasch and Birch  
; STREET: PO Box 747  
; CITY: Falls Church  
; STATE: VA  
; COUNTRY: US  
; ZIP: 22040-0747  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/392,818  
; FILING DATE: 27-FEB-1995  
; CLASSIFICATION: 435  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Murphy Jr, Gerald M  
; REGISTRATION NUMBER: 28,977  
; REFERENCE/DOCKET NUMBER: 0171-533P  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (703) 205-8000  
; TELEFAX: (703) 205-8050  
; TELEX: 248345



INFORMATION FOR SEQ ID NO: 22:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 19 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: other nucleic acid  
DESCRIPTION: /desc = "PRIMER"  
HYPOTHETICAL: NO  
ANTI-SENSE: NO  
ORIGINAL SOURCE:  
ORGANISM: Homo sapiens  
US-08-392-818-22

Query Match 3.3%; Score 14.8; DB 1; Length 19;  
Best Local Similarity 88.9%; Pred. No. 1.8e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 348 GTTCAGGCCTTTCAGGCC 365  
| ||||| ||||| |||||  
Db 1 GATCAGGCCTTTTAGGCC 18

## RESULT 180

US-09-205-995-24  
Sequence 24, Application US/09205995  
Patent No. 6368855  
GENERAL INFORMATION:  
APPLICANT: Xu, Minzhen  
APPLICANT: Qiu, Gang  
APPLICANT: Humphreys, Robert  
TITLE OF INVENTION: CANCER CELL VACCINE  
FILE REFERENCE: U.S. Application 09/205,995, (CIP)  
CURRENT APPLICATION NUMBER: US/09/205,995  
CURRENT FILING DATE: 1998-12-04  
PRIOR APPLICATION NUMBER: 09/036,746  
PRIOR FILING DATE: 1998-03-09  
PRIOR APPLICATION NUMBER: 08/661,627  
PRIOR FILING DATE: 1996-06-11  
NUMBER OF SEQ ID NOS: 79  
SOFTWARE: PatentIn Ver. 2.0  
SEQ ID NO 24  
LENGTH: 18  
TYPE: DNA  
ORGANISM: Artificial Sequence  
FEATURE:  
OTHER INFORMATION: Description of Artificial Sequence: antisense  
OTHER INFORMATION: oligonucleotide corresponding to a specific region  
OTHER INFORMATION: of the mouse H gene.  
US-09-205-995-24

Query Match 3.2%; Score 14.4; DB 1; Length 18;  
Best Local Similarity 93.8%; Pred. No. 1.9e+02;  
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 220 GGTGCGCTGCCAGCC 235  
||| ||||| |||||  
Db 1 GGTGCGCTGCCAGCC 16

## RESULT 181

US-08-630-019A-25/c  
Sequence 25, Application US/08630019A  
Patent No. 6015710  
GENERAL INFORMATION:  
APPLICANT: Shay, Jerry W.  
APPLICANT: Wright, Woodring B.  
APPLICANT: Piatyszek, Mieczyslaw A.  
APPLICANT: Corey, David  
APPLICANT: No. 6015710ton, James C.  
TITLE OF INVENTION: Modulation of Mammalian Telomerase by  
TITLE OF INVENTION: Peptide Nucleic Acids  
NUMBER OF SEQUENCES: 46

CORRESPONDENCE ADDRESS:  
ADDRESSEE: Townsend and Townsend and Crew LLP  
STREET: Two Embarcadero Center, Eighth Floor  
CITY: San Francisco  
STATE: California  
COUNTRY: USA  
ZIP: 94111-3834  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/630,019A  
FILING DATE: 09-JUN-1996  
CLASSIFICATION: 536  
ATTORNEY/AGENT INFORMATION:  
NAME: Storella, John R.  
REGISTRATION NUMBER: 32,944  
REFERENCE/DOCKET NUMBER: 015389-001600US  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (415) 576-0200  
TELEFAX: (415) 576-0300  
INFORMATION FOR SEQ ID NO: 25:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 14 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: other nucleic acid  
DESCRIPTION: /desc = "peptide nucleic acid (PNA),  
DESCRIPTION: where (deoxy)ribose-phosphate linkages are replaced by  
DESCRIPTION: N-(2-aminoethyl)glycine units linked to nucleotide bases via  
DESCRIPTION: glycine amino nitrogen through a methylenecarbonyl linker"  
US-08-630-019A-25

Query Match 3.1%; Score 14; DB 1; Length 14;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 52 CTAACGTGAGAGGG 65  
||||| ||||| |||||  
Db 14 CTAACGTGAGAGGG 1

## RESULT 182

US-08-158-352-2  
Sequence 2, Application US/08158352  
Patent No. 5700922  
GENERAL INFORMATION:  
APPLICANT: Philip Dan Cook  
TITLE OF INVENTION: PNA-DNA-PNA Chimeric  
TITLE OF INVENTION: Macromolecules  
NUMBER OF SEQUENCES: 4  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Woodcock Washburn Kurtz Mackiewicz and  
ADDRESSEE: No. 5700922ris  
STREET: One Liberty Place - 46th Floor  
CITY: Philadelphia  
STATE: PA  
COUNTRY: U.S.A.  
ZIP: 19103  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk, 1.44 Mb storage  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Wordperfect 5.1  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/158,352  
FILING DATE: herewith  
CLASSIFICATION: 514  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US92/11339

```

/ TITLE OF INVENTION: MODULATION OF GENE EXPRESSION
/
/ TITLE OF INVENTION: IN PLANTS
/
/ NUMBER OF SEQUENCES: 1263
/
/ CORRESPONDENCE ADDRESS:
/
/ ADDRESSEE: Lyon & Lyon
/
/ STREET: 633 West Fifth Street
/
/ STREET: Suite 4700
/
/ CITY: Los Angeles
/
/ STATE: California
/
/ COUNTRY: U.S.A.
/
/ ZIP: 90071-2066
/
/ COMPUTER READABLE FORM:
/
/ MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
/
/ MEDIUM TYPE: storage
/
/ COMPUTER: IBM Compatible
/
/ OPERATING SYSTEM: IBM P.C. DOS 5.0
/
/ SOFTWARE: Word Perfect 5.1
/
/ CURRENT APPLICATION DATA:
/
/ APPLICATION NUMBER: US/08/679,645
/
/ FILING DATE: July 12, 1996
/
/ CLASSIFICATION: 800
/
/ PRIOR APPLICATION DATA:
/
/ APPLICATION NUMBER: 60/001,135
/
/ FILING DATE: July 13, 1995
/
/ APPLICATION NUMBER: 08/300,726
/
/ FILING DATE: September 2, 1994
/
/ ATTORNEY/AGENT INFORMATION:
/
/ NAME: Warburg, Richard J.
/
/ REGISTRATION NUMBER: 32,327
/
/ REFERENCE/DOCKET NUMBER: 219/247
/
/ TELECOMMUNICATION INFORMATION:
/
/ TELEPHONE: (213) 489-1600
/
/ TELEFAX: (213) 955-0440
/
/ TELEX: 67-3510
/
/ INFORMATION FOR SEQ ID NO: 826:
/
/ SEQUENCE CHARACTERISTICS:
/
/ LENGTH: 17 base pairs
/
/ TYPE: nucleic acid
/
/ STRANDEDNESS: single
/
/ TOPOLOGY: linear
/
/ US-08-679-645-826
/
/
/ Query Match 3.1%; Score 13.8; DB 1; Id
/
/ Best Local Similarity 64.7%; Pred. No. 1.9e-02;
/
/ Matches 11; Conservative 4; Mismatches 2; I
/
/
/ QY 106 CGCTGACTTTCAGCGG 122
/
/ |||::|::|::|::|
/
/ Db 1 CGCGCCCUUACGCGG 17
/
/
/ RESULT 185
/
/ US-08-679-645-571
/
/ Sequence 571, Application US/08679645
/
/ Patent No. 6350934
/
/ GENERAL INFORMATION:
/
/ APPLICANT: Zwick, Michael G.
/
/ APPLICANT: Edington, Brent E.
/
/ APPLICANT: McSwiggen, James A.
/
/ APPLICANT: Merlo, Patricia Ann Owens
/
/ APPLICANT: Guo, Lining
/
/ APPLICANT: Skokut, Thomas A.
/
/ APPLICANT: Young, Scott A.
/
/ APPLICANT: Folkerts, Otto
/
/ APPLICANT: Merlo, Donald J.
/
/ TITLE OF INVENTION: COMPOSITION AND METHODS FOR
/
/ TITLE OF INVENTION: MODULATION OF GENE EXPRESSION
/
/ TITLE OF INVENTION: IN PLANTS
/
/ NUMBER OF SEQUENCES: 1263
/
/ CORRESPONDENCE ADDRESS:
/
/ ADDRESSEE: Lyon & Lyon
/
/ STREET: 633 West Fifth Street
/
/ STREET: Suite 4700

```

```

; CITY: Los Angeles
; STATE: California
; COUNTRY: U.S.A.
; ZIP: 90071-2066
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
; MEDIUM TYPE: storage
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: IBM P.C. DOS 5.0
; SOFTWARE: Word Perfect 5.1
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/679,645
; FILING DATE: July 12, 1996
; CLASSIFICATION: 800
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 60/001,135
; FILING DATE: July 13, 1995
; APPLICATION NUMBER: 08/300,726
; FILING DATE: September 2, 1994
; ATTORNEY/AGENT INFORMATION:
; NAME: Warburg, Richard J.
; REGISTRATION NUMBER: 32,327
; REFERENCE/DOCKET NUMBER: 219/247
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (213) 489-1600
; TELEFAX: (213) 955-0440
; TELEX: 67-3510
; INFORMATION FOR SEQ ID NO: 571:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 18 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; US-08-679-645-571

Query Match 3.1%; Score 13.8; DB 1; Length 18;
Best Local Similarity 82.4%; Pred. No. 2e+02;
Matches 14; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 134 CGGCTGCGCGCTTCCA 150
Db 2 CGGCGUGCGCGCGCCA 18

RESULT 186
US-09-586-376-11
; Sequence 11, Application US/09586376
; Patent No. 6492115
; GENERAL INFORMATION:
; APPLICANT: Guida, Marco
; TITLE OF INVENTION: GENETIC TYPING OF THE HUMAN CYTOCHROME P450 2A6 GENE
; FILE REFERENCE: 4389-20
; CURRENT APPLICATION NUMBER: US/09/586,376
; CURRENT FILING DATE: 2000-06-02
; NUMBER OF SEQ ID NOS: 29
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 11
; LENGTH: 17
; TYPE: DNA
; ORGANISM: Homo sapiens
; US-09-586-376-11

Query Match 3.0%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 2e+02;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 41 TTTGCTAACCCCTAA 55
Db 3 TTTGCTTACCCCTAA 17

RESULT 187
US-09-586-376-12
; Sequence 12, Application US/09586376
; Patent No. 6492115
; GENERAL INFORMATION:
; APPLICANT: Guida, Marco
; TITLE OF INVENTION: GENETIC TYPING OF THE HUMAN CYTOCHROME P450 2A6 GENE
; FILE REFERENCE: 4389-20
; CURRENT APPLICATION NUMBER: US/09/586,376
; CURRENT FILING DATE: 2000-06-02
; NUMBER OF SEQ ID NOS: 29
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 12
; LENGTH: 17
; TYPE: DNA
; ORGANISM: Homo sapiens
; US-09-586-376-12

Query Match 3.0%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 2e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 41 TTTGCTAACCCCTAA 55
Db 3 TTTGCTCACCCCTAA 17

RESULT 188
US-09-371-772B-4559
; Sequence 4559, Application US/09371772B
; Patent No. 6566127
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals, Inc.
; APPLICANT: Pavco, Pam
; APPLICANT: McSwiggen, Jim
; APPLICANT: Stinchcomb, Dan
; APPLICANT: Escobedo, Jaime
; TITLE OF INVENTION: Method and Reagent for the Treatment of Diseases or Conditions Re
; FILE REFERENCE: MBH00.876-J (237/198)
; CURRENT APPLICATION NUMBER: US/09/371,772B
; CURRENT FILING DATE: 1999-08-10
; PRIOR APPLICATION NUMBER: US 60/005,974
; PRIOR FILING DATE: 1995-10-26
; PRIOR APPLICATION NUMBER: US 08/584,040
; PRIOR FILING DATE: 1996-01-08
; NUMBER OF SEQ ID NOS: 14225
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 4559
; LENGTH: 17
; TYPE: RNA
; ORGANISM: Homo sapiens
; US-09-371-772B-4559

Query Match 3.0%; Score 13.4; DB 1; Length 17;
Best Local Similarity 86.7%; Pred. No. 2e+02;
Matches 13; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

Qy 164 AGCAACACAAAAATG 178
Db 2 AGCAAGCAAAAAAUG 16

RESULT 189
US-10-232-634-11
; Sequence 11, Application US/10232634
; Patent No. 6797477
; GENERAL INFORMATION:
; APPLICANT: Guida, Marco
; TITLE OF INVENTION: GENETIC TYPING OF THE HUMAN CYTOCHROME P450 2A6 GENE
; APPLICANT: Hall, Jeff
; FILE REFERENCE: 4389-20
; CURRENT APPLICATION NUMBER: US/09/586,376
; CURRENT FILING DATE: 2000-06-02
; NUMBER OF SEQ ID NOS: 29
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 11
; LENGTH: 17
; TYPE: DNA
; ORGANISM: Homo sapiens
; US-09-586-376-11

Query Match 3.0%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 2e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 41 TTTGCTAACCCCTAA 55
Db 3 TTTGCTTACCCCTAA 17
```

; TITLE OF INVENTION: AND RELATED MATERIALS AND METHODS  
; FILE REFERENCE: 4389-20  
; CURRENT APPLICATION NUMBER: US/10/232,634  
; CURRENT FILING DATE: 2002-08-30  
; PRIOR APPLICATION NUMBER: US/09/586,376  
; PRIOR FILING DATE: 2000-06-02  
; NUMBER OF SEQ ID NOS: 29  
; SOFTWARE: PatentIn Ver. 2.1  
; SEQ ID NO 11  
; LENGTH: 17  
; TYPE: DNA  
; ORGANISM: Homo sapiens  
US-10-232-634-11

Query Match 3.0%; Score 13.4; DB 1; Length 17;  
Best Local Similarity 93.3%; Pred. No. 2e+02;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 41 TTTGTCTTACCCTAA 55  
||||| |||||  
Db 3 TTTGTCTTACCCTAA 17

## RESULT 190

US-10-232-634-12  
; Sequence 12, Application US/10232634  
; Patent No. 6797477  
; GENERAL INFORMATION:  
; APPLICANT: Guida, Marco  
; APPLICANT: Hall, Jeff  
; TITLE OF INVENTION: GENETIC TYPING OF THE HUMAN CYTOCHROME P450 2A6 GENE  
; FILE REFERENCE: 4389-20  
; CURRENT APPLICATION NUMBER: US/10/232,634  
; CURRENT FILING DATE: 2002-08-30  
; PRIOR APPLICATION NUMBER: US/09/586,376  
; PRIOR FILING DATE: 2000-06-02  
; NUMBER OF SEQ ID NOS: 29  
; SOFTWARE: PatentIn Ver. 2.1  
; SEQ ID NO 12  
; LENGTH: 17  
; TYPE: DNA  
; ORGANISM: Homo sapiens  
US-10-232-634-12

Query Match 3.0%; Score 13.4; DB 1; Length 17;  
Best Local Similarity 93.3%; Pred. No. 2e+02;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 41 TTTGTCTTACCCTAA 55  
||||| |||||  
Db 3 TTTGTCTTACCCTAA 17

## RESULT 191

US-08-630-019A-11/c  
; Sequence 11, Application US/08630019A  
; Patent No. 6015710  
; GENERAL INFORMATION:  
; APPLICANT: Shay, Jerry W.  
; APPLICANT: Wright, Woodring E.  
; APPLICANT: Piatyszek, Mieczyslaw A.  
; APPLICANT: Corey, David  
; APPLICANT: No. 6015710ton, James C.  
; TITLE OF INVENTION: Modulation of Mammalian Telomerase by  
; NUMBER OF SEQUENCES: 46  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Townsend and Townsend and Crew LLP  
; STREET: Two Embarcadero Center, Eighth Floor  
; CITY: San Francisco  
; STATE: California  
; COUNTRY: USA

ZIP: 94111-3834  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/630,019A  
; FILING DATE: 09-JUN-1996  
; CLASSIFICATION: 536  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Storella, John R.  
; REGISTRATION NUMBER: 32,944  
; REFERENCE/DOCKET NUMBER: 015389-001600US  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (415) 576-0200  
; TELEFAX: (415) 576-0300

; INFORMATION FOR SEQ ID NO: 11:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 13 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear

; MOLECULE TYPE: other nucleic acid  
; DESCRIPTION: /desc = "peptide nucleic acid (PNA),  
; DESCRIPTION: where (deoxy)ribose-phosphate linkages are replaced by  
; DESCRIPTION: N-(2-aminoethyl)glycine units linked to nucleotide bases via  
; DESCRIPTION: glycine amino nitrogen through a methylenecarbonyl linker"  
US-08-630-019A-11

Query Match 2.9%; Score 13; DB 1; Length 13;  
Best Local Similarity 100.0%; Pred. No. 1.7e+02;  
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 46 CTAACCCCTAACTG 58  
||||| |||||  
Db 13 CTAACCCCTAACTG 1

## RESULT 192

US-08-630-019A-15/c  
; Sequence 15, Application US/08630019A  
; Patent No. 6015710  
; GENERAL INFORMATION:  
; APPLICANT: Shay, Jerry W.  
; APPLICANT: Wright, Woodring E.  
; APPLICANT: Piatyszek, Mieczyslaw A.  
; APPLICANT: Corey, David  
; APPLICANT: No. 6015710ton, James C.  
; TITLE OF INVENTION: Modulation of Mammalian Telomerase by  
; TITLE OF INVENTION: Peptide Nucleic Acids  
; NUMBER OF SEQUENCES: 46  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Townsend and Townsend and Crew LLP  
; STREET: Two Embarcadero Center, Eighth Floor  
; CITY: San Francisco  
; STATE: California  
; COUNTRY: USA  
; ZIP: 94111-3834  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/630,019A  
; FILING DATE: 09-JUN-1996  
; CLASSIFICATION: 536  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Storella, John R.  
; REGISTRATION NUMBER: 32,944  
; REFERENCE/DOCKET NUMBER: 015389-001600US  
; TELECOMMUNICATION INFORMATION:

; TELEPHONE: (415) 576-0200  
; TELEFAX: (415) 576-0300  
; INFORMATION FOR SEQ ID NO: 15:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 13 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: other nucleic acid  
; DESCRIPTION: /desc = "peptide nucleic acid (PNA),  
; DESCRIPTION: where (deoxy)ribose-phosphate linkages are replaced by  
; DESCRIPTION: N-(2-aminethyl)glycine units linked to nucleotide bases via  
; DESCRIPTION: glycine amino nitrogen through a methylenecarbonyl linker"  
US-08-630-019A-15

Query Match 2.9%; Score 13; DB 1; Length 13;  
Best Local Similarity 100.0%; Pred. No. 1.7e+02;  
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 44 GTCTAACCTTAAC 56  
| | | | | | | | | | | | |  
Db 13 GTCTAACCTTAAC 1

RESULT 193  
US-08-630-019A-17/c  
; Sequence 17, Application US/08630019A  
; Patent No. 6015710  
; GENERAL INFORMATION:  
; APPLICANT: Shay, Jerry W.  
; APPLICANT: Wright, Woodring E.  
; APPLICANT: Piatyszek, Mieczyslaw A.  
; APPLICANT: Corey, David  
; APPLICANT: No. 6015710ton, James C.  
; TITLE OF INVENTION: Modulation of Mammalian Telomerase by  
; TITLE OF INVENTION: Peptide Nucleic Acids  
; NUMBER OF SEQUENCES: 46  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Townsend and Townsend and Crew LLP  
; STREET: Two Embarcadero Center, Eighth Floor  
; CITY: San Francisco  
; STATE: California  
; COUNTRY: USA  
; ZIP: 94111-3834  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/630,019A  
; FILING DATE: 09-JUN-1996  
; CLASSIFICATION: 536  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Storella, John R.  
; REGISTRATION NUMBER: 32,944  
; REFERENCE/DOCKET NUMBER: 015389-001600US  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (415) 576-0200  
; TELEFAX: (415) 576-0300  
; INFORMATION FOR SEQ ID NO: 17:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 13 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: other nucleic acid  
; DESCRIPTION: /desc = "peptide nucleic acid (PNA),  
; DESCRIPTION: where (deoxy)ribose-phosphate linkages are replaced by  
; DESCRIPTION: N-(2-aminethyl)glycine units linked to nucleotide bases via  
; DESCRIPTION: glycine amino nitrogen through a methylenecarbonyl linker"  
US-08-630-019A-17

Query Match 2.9%; Score 13; DB 1; Length 13;  
Best Local Similarity 100.0%; Pred. No. 1.7e+02;  
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 42 TTGCTAACCCCTA 54  
| | | | | | | | | | | | |  
Db 13 TTGCTAACCCCTA 1

RESULT 194  
US-08-630-019A-41/c  
; Sequence 41, Application US/08630019A  
; Patent No. 6015710  
; GENERAL INFORMATION:  
; APPLICANT: Shay, Jerry W.  
; APPLICANT: Wright, Woodring E.  
; APPLICANT: Piatyszek, Mieczyslaw A.  
; APPLICANT: Corey, David  
; APPLICANT: No. 6015710ton, James C.  
; TITLE OF INVENTION: Modulation of Mammalian Telomerase by  
; TITLE OF INVENTION: Peptide Nucleic Acids  
; NUMBER OF SEQUENCES: 46  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Townsend and Townsend and Crew LLP  
; STREET: Two Embarcadero Center, Eighth Floor  
; CITY: San Francisco  
; STATE: California  
; COUNTRY: USA  
; ZIP: 94111-3834  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/630,019A  
; FILING DATE: 09-JUN-1996  
; CLASSIFICATION: 536  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Storella, John R.  
; REGISTRATION NUMBER: 32,944  
; REFERENCE/DOCKET NUMBER: 015389-001600US  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (415) 576-0200  
; TELEFAX: (415) 576-0300  
; INFORMATION FOR SEQ ID NO: 41:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 13 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: other nucleic acid  
; DESCRIPTION: /desc = "phosphorothioate (PS) nucleic acid"  
US-08-630-019A-41

Query Match 2.9%; Score 13; DB 1; Length 13;  
Best Local Similarity 100.0%; Pred. No. 1.7e+02;  
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 42 TTGCTAACCCCTA 54  
| | | | | | | | | | | | |  
Db 13 TTGCTAACCCCTA 1

RESULT 195  
US-08-638-545-1/c  
; Sequence 1, Application US/08838545  
; Patent No. 6046307  
; GENERAL INFORMATION:  
; APPLICANT: Shay, Jerry W.  
; APPLICANT: Wright, Woodring E.  
; APPLICANT: Piatyszek, Mieczyslaw A.  
; APPLICANT: Corey, David R.

APPLICANT: No. 6046307ton, James C.  
TITLE OF INVENTION: Modulation of Mammalian Telomerase by  
TITLE OF INVENTION: Peptide Nucleic Acids  
NUMBER OF SEQUENCES: 60  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Townsend and Townsend and Crew LLP  
STREET: Two Embarcadero Center, Eighth Floor  
CITY: San Francisco  
STATE: California  
COUNTRY: USA  
ZIP: 94111-3834  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/838,545  
FILING DATE: 09-APR-1997  
CLASSIFICATION: 536  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/630,019  
FILING DATE: 09-APR-1996  
ATTORNEY/AGENT INFORMATION:  
NAME: Storella, John R.  
REGISTRATION NUMBER: 32,944  
REFERENCE/DOCKET NUMBER: 015389-001610US  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (415) 576-0200  
TELEFAX: (415) 576-0300  
INFORMATION FOR SEQ ID NO: 1:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 13 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: other nucleic acid  
DESCRIPTION: /desc = "peptide nucleic acid (PNA),  
DESCRIPTION: where (deoxy(ribose-phosphate linkages are replaced by  
DESCRIPTION: N-(2-aminoethyl)glycine units linked to nucleotide bases via  
DESCRIPTION: glycine amino N through a methylenecarbonyl linker"  
US-08-838-545-1

Query Match 2.9%; Score 13; DB 1; Length 13;  
Best Local Similarity 100.0%; Pred. No. 1.7e+02;  
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 46 CTAACCCCTAACTG 58  
Db 13 CTAACCCCTAACTG 1

RESULT 196  
US-08-838-545-4/c  
Sequence 4, Application US/08838545  
Patent No. 6046307  
GENERAL INFORMATION:  
APPLICANT: Shay, Jerry W.  
APPLICANT: Wright, Woodring E.  
APPLICANT: Piatyszek, Mieczyslaw A.  
APPLICANT: Corey, David R.  
APPLICANT: No. 6046307ton, James C.  
TITLE OF INVENTION: Modulation of Mammalian Telomerase by  
TITLE OF INVENTION: Peptide Nucleic Acids  
NUMBER OF SEQUENCES: 60  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Townsend and Townsend and Crew LLP  
STREET: Two Embarcadero Center, Eighth Floor  
CITY: San Francisco  
STATE: California  
COUNTRY: USA  
ZIP: 94111-3834  
COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/838,545  
FILING DATE: 09-APR-1997  
CLASSIFICATION: 536  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/630,019  
FILING DATE: 09-APR-1996  
ATTORNEY/AGENT INFORMATION:  
NAME: Storella, John R.  
REGISTRATION NUMBER: 32,944  
REFERENCE/DOCKET NUMBER: 015389-001610US  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (415) 576-0200  
TELEFAX: (415) 576-0300  
INFORMATION FOR SEQ ID NO: 4:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 13 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: other nucleic acid  
DESCRIPTION: /desc = "peptide nucleic acid (PNA),  
DESCRIPTION: where (deoxy(ribose-phosphate linkages are replaced by  
DESCRIPTION: N-(2-aminoethyl)glycine units linked to nucleotide bases via  
DESCRIPTION: glycine amino N through a methylenecarbonyl linker"  
US-08-838-545-4

Query Match 2.9%; Score 13; DB 1; Length 13;  
Best Local Similarity 100.0%; Pred. No. 1.7e+02;  
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 42 TTGTCTAACCCCTA 54  
Db 13 TTGTCTAACCCCTA 1

RESULT 197  
US-08-838-545-12/c  
Sequence 12, Application US/08838545  
Patent No. 6046307  
GENERAL INFORMATION:  
APPLICANT: Shay, Jerry W.  
APPLICANT: Wright, Woodring E.  
APPLICANT: Piatyszek, Mieczyslaw A.  
APPLICANT: Corey, David R.  
APPLICANT: No. 6046307ton, James C.  
TITLE OF INVENTION: Modulation of Mammalian Telomerase by  
TITLE OF INVENTION: Peptide Nucleic Acids  
NUMBER OF SEQUENCES: 60  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Townsend and Townsend and Crew LLP  
STREET: Two Embarcadero Center, Eighth Floor  
CITY: San Francisco  
STATE: California  
COUNTRY: USA  
ZIP: 94111-3834  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/838,545  
FILING DATE: 09-APR-1997  
CLASSIFICATION: 536  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/630,019  
FILING DATE: 09-APR-1996  
ATTORNEY/AGENT INFORMATION:

```
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-001610US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 12:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 13 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: other nucleic acid
; DESCRIPTION: /desc = "peptide nucleic acid (PNA),
; DESCRIPTION: where (deoxy(ribose-phosphate linkages are replaced by
; DESCRIPTION: N-(2-aminoethyl)glycine units linked to nucleotide bases via
; DESCRIPTION: glycine amino N through a methylenecarbonyl linker"
US-08-838-545-12

Query Match 2.9%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.7e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 44 GTCTAACCTTAAAC 56
Db 13 GTCTAACCTTAAAC 1

RESULT 198
US-08-838-545-46/c
; Sequence 46, Application US/08838545
; Patent No. 6046307
; GENERAL INFORMATION:
; APPLICANT: Shay, Jerry W.
; APPLICANT: Wright, Woodring E.
; APPLICANT: Piatyszek, Mieczyslaw A.
; APPLICANT: Corey, David R.
; APPLICANT: No. 6046307ton, James C.
; TITLE OF INVENTION: Modulation of Mammalian Telomerase by
; TITLE OF INVENTION: Peptide Nucleic Acids
; NUMBER OF SEQUENCES: 60
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/838,545
; FILING DATE: 09-APR-1997
; CLASSIFICATION: 536
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/630,019
; FILING DATE: 09-APR-1996
; ATTORNEY/AGENT INFORMATION:
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-001610US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 13:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 13 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: other nucleic acid
; DESCRIPTION: /desc = "peptide nucleic acid (PNA),
; DESCRIPTION: where (deoxy(ribose-phosphate linkages are replaced by
; DESCRIPTION: N-(2-aminoethyl)glycine units linked to nucleotide bases via
; DESCRIPTION: glycine amino N through a methylenecarbonyl linker"
US-08-838-545-51

Query Match 2.9%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.7e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 38 TTTTGTCTTAAAC 50
Db 13 TTTTGTCTTAAAC 1
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; MOLECULE TYPE: other nucleic acid
; DESCRIPTION: /desc = "phosphorothioate (PS)
; DESCRIPTION: nucleic acid"
US-08-838-545-46

Query Match 2.9%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.7e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 42 TTGCTAACCTTA 54
Db 13 TTGCTAACCTTA 1

RESULT 199
US-08-838-545-51/c
; Sequence 51, Application US/08838545
; Patent No. 6046307
; GENERAL INFORMATION:
; APPLICANT: Shay, Jerry W.
; APPLICANT: Wright, Woodring E.
; APPLICANT: Piatyszek, Mieczyslaw A.
; APPLICANT: Corey, David R.
; APPLICANT: No. 6046307ton, James C.
; TITLE OF INVENTION: Modulation of Mammalian Telomerase by
; TITLE OF INVENTION: Peptide Nucleic Acids
; NUMBER OF SEQUENCES: 60
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/838,545
; FILING DATE: 09-APR-1997
; CLASSIFICATION: 536
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/630,019
; FILING DATE: 09-APR-1996
; ATTORNEY/AGENT INFORMATION:
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-001610US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 51:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 13 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: other nucleic acid
; DESCRIPTION: /desc = "peptide nucleic acid (PNA),
; DESCRIPTION: where (deoxy(ribose-phosphate linkages are replaced by
; DESCRIPTION: N-(2-aminoethyl)glycine units linked to nucleotide bases via
; DESCRIPTION: glycine amino N through a methylenecarbonyl linker"
US-08-838-545-51

Query Match 2.9%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.7e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 38 TTTTGTCTTAAAC 50
Db 13 TTTTGTCTTAAAC 1
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RESULT 200
US-08-838-545-52/c
; Sequence 52, Application US/08838545
; Patent No. 6046307
; GENERAL INFORMATION:
; APPLICANT: Shay, Jerry W.
; APPLICANT: Wright, Woodring E.
; APPLICANT: Piatyszek, Mieczyslaw A.
; APPLICANT: Corey, David R.
; APPLICANT: No. 6046307ton, James C.
; TITLE OF INVENTION: Modulation of Mammalian Telomerase by
; TITLE OF INVENTION: Peptide Nucleic Acids
; NUMBER OF SEQUENCES: 60
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/838,545
; FILING DATE: 09-APR-1997
; CLASSIFICATION: 536
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/630,019
; FILING DATE: 09-APR-1996
; ATTORNEY/AGENT INFORMATION:
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-001610US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 52:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 13 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: other nucleic acid
; DESCRIPTION: /desc = "peptide nucleic acid (PNA),
; DESCRIPTION: where (deoxy(ribose-phosphate linkages are replaced by
; DESCRIPTION: N-(2-aminoethyl)glycine units linked to nucleotide bases via
; DESCRIPTION: glycine amino N through a methylenecarbonyl linker"
US-08-838-545-52

Query Match 2.9%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.7e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 53 TTAACGTGAGAAGG 65
Db 13 TTAACGTGAGAAGG 1

RESULT 202
US-08-838-545-56/c
; Sequence 56, Application US/08838545
; Patent No. 6046307
; GENERAL INFORMATION:
; APPLICANT: Shay, Jerry W.
; APPLICANT: Wright, Woodring E.
; APPLICANT: Piatyszek, Mieczyslaw A.
; APPLICANT: Corey, David R.
; APPLICANT: No. 6046307ton, James C.
; TITLE OF INVENTION: Modulation of Mammalian Telomerase by
; TITLE OF INVENTION: Peptide Nucleic Acids
; NUMBER OF SEQUENCES: 60
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/838,545
; FILING DATE: 09-APR-1997
; CLASSIFICATION: 536
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/630,019
; FILING DATE: 09-APR-1996
; ATTORNEY/AGENT INFORMATION:
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-001610US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 55:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 13 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: other nucleic acid
; DESCRIPTION: /desc = "peptide nucleic acid (PNA),
; DESCRIPTION: where (deoxy(ribose-phosphate linkages are replaced by
; DESCRIPTION: N-(2-aminoethyl)glycine units linked to nucleotide bases via
; DESCRIPTION: glycine amino N through a methylenecarbonyl linker"
US-08-838-545-55

Query Match 2.9%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.7e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 53 TTAACGTGAGAAGG 65
Db 13 TTAACGTGAGAAGG 1

RESULT 203
US-08-838-545-55/c
; Sequence 55, Application US/08838545
; Patent No. 6046307
; GENERAL INFORMATION:
; APPLICANT: Shay, Jerry W.
; APPLICANT: Wright, Woodring E.
; APPLICANT: Piatyszek, Mieczyslaw A.
; APPLICANT: Corey, David R.
; APPLICANT: No. 6046307ton, James C.
; TITLE OF INVENTION: Modulation of Mammalian Telomerase by
; TITLE OF INVENTION: Peptide Nucleic Acids
; NUMBER OF SEQUENCES: 60
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/838,545
; FILING DATE: 09-APR-1997
; CLASSIFICATION: 536
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/630,019
; FILING DATE: 09-APR-1996
; ATTORNEY/AGENT INFORMATION:
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-001610US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 52:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 13 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: other nucleic acid
; DESCRIPTION: /desc = "peptide nucleic acid (PNA),
; DESCRIPTION: where (deoxy(ribose-phosphate linkages are replaced by
; DESCRIPTION: N-(2-aminoethyl)glycine units linked to nucleotide bases via
; DESCRIPTION: glycine amino N through a methylenecarbonyl linker"
US-08-838-545-52

Query Match 2.9%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.7e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 39 TTTTGTCTTAACC 51
Db 13 TTTTGTCTTAACC 1

RESULT 201
US-08-838-545-55/c
; Sequence 55, Application US/08838545
; Patent No. 6046307
; GENERAL INFORMATION:
; APPLICANT: Shay, Jerry W.
; APPLICANT: Wright, Woodring E.
; APPLICANT: Piatyszek, Mieczyslaw A.
; APPLICANT: Corey, David R.
; APPLICANT: No. 6046307ton, James C.
```



```
;
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/838,545
; FILING DATE: 09-APR-1997
; CLASSIFICATION: 536
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/630,019
; FILING DATE: 09-APR-1996
; ATTORNEY/AGENT INFORMATION:
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-001610US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 56:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 13 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: other nucleic acid
; DESCRIPTION: /desc = "peptide nucleic acid (PNA),
; DESCRIPTION: where (deoxy(ribose-phosphate linkages are replaced by
; DESCRIPTION: N-(2-aminoethyl)glycine units linked to nucleotide bases via
; DESCRIPTION: glycine amino N through a methylenecarbonyl linker"
; US-08-838-545-56

Query Match 2.9%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.7e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 55 ACTGAGAAGGCG 67
Db 13 ACTGAGAAGGCG 1

RESULT 203
US-09-349-532-1/c
; Sequence 1, Application US/09349532
; Patent No. 6294650
; GENERAL INFORMATION:
; APPLICANT: Shay, Jerry W.
; APPLICANT: Wright, Woodring E.
; APPLICANT: Piatyszek, Mieczyslaw A.
; APPLICANT: Corey, David R.
; APPLICANT: No. 6294650ton, James C.
; TITLE OF INVENTION: Modulation of Mammalian Telomerase by
; NUMBER OF SEQUENCES: 60
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/349,532
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/838,545
; FILING DATE: 09-APR-1997
; APPLICATION NUMBER: US 08/630,019
; FILING DATE: 09-APR-1996
; ATTORNEY/AGENT INFORMATION:
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-001610US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 4:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 13 base pairs
```

```
;
; ATTORNEY/AGENT INFORMATION:
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-001610US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 1:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 13 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: other nucleic acid
; DESCRIPTION: /desc = "peptide nucleic acid (PNA),
; DESCRIPTION: where (deoxy(ribose-phosphate linkages are replaced by
; DESCRIPTION: N-(2-aminoethyl)glycine units linked to nucleotide bases via
; DESCRIPTION: glycine amino N through a methylenecarbonyl linker"
; US-09-349-532-1

Query Match 2.9%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.7e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 46 CTAACCCCTAACTG 58
Db 13 CTAACCCCTAACTG 1

RESULT 204
US-09-349-532-4/c
; Sequence 4, Application US/09349532
; Patent No. 6294650
; GENERAL INFORMATION:
; APPLICANT: Shay, Jerry W.
; APPLICANT: Wright, Woodring E.
; APPLICANT: Piatyszek, Mieczyslaw A.
; APPLICANT: Corey, David R.
; APPLICANT: No. 6294650ton, James C.
; TITLE OF INVENTION: Modulation of Mammalian Telomerase by
; NUMBER OF SEQUENCES: 60
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/349,532
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/838,545
; FILING DATE: 09-APR-1997
; APPLICATION NUMBER: US 08/630,019
; FILING DATE: 09-APR-1996
; ATTORNEY/AGENT INFORMATION:
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-001610US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 4:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 13 base pairs
```

;  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: other nucleic acid  
; DESCRIPTION: /desc = "peptide nucleic acid (PNA)",  
; DESCRIPTION: where (deoxy(ribose-phosphate linkages are replaced by  
; DESCRIPTION: N-(2-aminoethyl)glycine units linked to nucleotide bases via  
; DESCRIPTION: glycine amino N through a methylenecarbonyl linker"  
US-09-349-532-4

Query Match 2.9%; Score 13; DB 1; Length 13;  
Best Local Similarity 100.0%; Pred. No. 1.7e+02;  
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 42 TTGTCTAACCCCTA 54  
| | | | | | | | | |  
Db 13 TTGTCTAACCCCTA 1

RESULT 205  
US-09-349-532-12/c  
; Sequence 12, Application US/09349532  
; Patent No. 6294650  
; GENERAL INFORMATION:  
; APPLICANT: Shay, Jerry W.  
; APPLICANT: Wright, Woodring E.  
; APPLICANT: Piatyszek, Mieczyslaw A.  
; APPLICANT: Corey, David R.  
; APPLICANT: No. 6294650ton, James C.  
; TITLE OF INVENTION: Modulation of Mammalian Telomerase by  
; TITLE OF INVENTION: Peptide Nucleic Acids  
; NUMBER OF SEQUENCES: 60  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Townsend and Townsend and Crew LLP  
; STREET: Two Embarcadero Center, Eighth Floor  
; CITY: San Francisco  
; STATE: California  
; COUNTRY: USA  
; ZIP: 94111-3834  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/09/349,532  
; FILING DATE:  
; CLASSIFICATION:  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/838,545  
; FILING DATE: 09-APR-1997  
; APPLICATION NUMBER: US 08/630,019  
; FILING DATE: 09-APR-1996  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Storella, John R.  
; REGISTRATION NUMBER: 32,944  
; REFERENCE/DOCKET NUMBER: 015389-001610US  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (415) 576-0200  
; TELEFAX: (415) 576-0300  
; INFORMATION FOR SEQ ID NO: 12:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 13 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: other nucleic acid  
; DESCRIPTION: /desc = "peptide nucleic acid (PNA)",  
; DESCRIPTION: where (deoxy(ribose-phosphate linkages are replaced by  
; DESCRIPTION: N-(2-aminoethyl)glycine units linked to nucleotide bases via  
; DESCRIPTION: glycine amino N through a methylenecarbonyl linker"  
US-09-349-532-12

Query Match 2.9%; Score 13; DB 1; Length 13;  
Best Local Similarity 100.0%; Pred. No. 1.7e+02;  
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 44 GTCTAACCCCTAAC 56  
| | | | | | | | | |  
Db 13 GTCTAACCCCTAAC 1

RESULT 206  
US-09-349-532-46/c  
; Sequence 46, Application US/09349532  
; Patent No. 6294650  
; GENERAL INFORMATION:  
; APPLICANT: Shay, Jerry W.  
; APPLICANT: Wright, Woodring E.  
; APPLICANT: Piatyszek, Mieczyslaw A.  
; APPLICANT: Corey, David R.  
; APPLICANT: No. 6294650ton, James C.  
; TITLE OF INVENTION: Modulation of Mammalian Telomerase by  
; TITLE OF INVENTION: Peptide Nucleic Acids  
; NUMBER OF SEQUENCES: 60  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Townsend and Townsend and Crew LLP  
; STREET: Two Embarcadero Center, Eighth Floor  
; CITY: San Francisco  
; STATE: California  
; COUNTRY: USA  
; ZIP: 94111-3834  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/09/349,532  
; FILING DATE:  
; CLASSIFICATION:  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/838,545  
; FILING DATE: 09-APR-1997  
; APPLICATION NUMBER: US 08/630,019  
; FILING DATE: 09-APR-1996  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Storella, John R.  
; REGISTRATION NUMBER: 32,944  
; REFERENCE/DOCKET NUMBER: 015389-001610US  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (415) 576-0200  
; TELEFAX: (415) 576-0300  
; INFORMATION FOR SEQ ID NO: 46:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 13 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: other nucleic acid  
; DESCRIPTION: /desc = "phosphorothioate (PS)  
; DESCRIPTION: nucleic acid"  
US-09-349-532-46

Qy 42 TTGTCTAACCCCTA 54  
| | | | | | | | | |  
Db 13 TTGTCTAACCCCTA 1

RESULT 207  
US-09-349-532-51/c  
; Sequence 51, Application US/09349532

Query Match 2.9%; Score 13; DB 1; Length 13;  
Best Local Similarity 100.0%; Pred. No. 1.7e+02;  
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 42 TTGTCTAACCCCTA 54  
| | | | | | | | | |  
Db 13 TTGTCTAACCCCTA 1

RESULT 207  
US-09-349-532-51/c  
; Sequence 51, Application US/09349532

Patent No. 6294650  
GENERAL INFORMATION:  
APPLICANT: Shay, Jerry W.  
APPLICANT: Wright, Woodring E.  
APPLICANT: Piatyszek, Mieczyslaw A.  
APPLICANT: Corey, David R.  
APPLICANT: No. 6294650ton, James C.  
TITLE OF INVENTION: Modulation of Mammalian Telomerase by  
TITLE OF INVENTION: Peptide Nucleic Acids  
NUMBER OF SEQUENCES: 60  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Townsend and Townsend and Crew LLP  
STREET: Two Embarcadero Center, Eighth Floor  
CITY: San Francisco  
STATE: California  
COUNTRY: USA  
ZIP: 94111-3834  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/09/349,532  
FILING DATE:  
CLASSIFICATION:  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/838,545  
FILING DATE: 09-APR-1997  
APPLICATION NUMBER: US 08/630,019  
FILING DATE: 09-APR-1996  
ATTORNEY/AGENT INFORMATION:  
NAME: Storella, John R.  
REGISTRATION NUMBER: 32,944  
REFERENCE/DOCKET NUMBER: 015389-001610US  
TELEPHONE: (415) 576-0200  
TELEFAX: (415) 576-0300  
INFORMATION FOR SEQ ID NO: 51:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 13 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: other nucleic acid  
DESCRIPTION: /desc = "peptide nucleic acid (PNA),  
DESCRIPTION: where (deoxy(ribose-phosphate linkages are replaced by  
DESCRIPTION: N-(2-aminoethyl)glycine units linked to nucleotide bases via  
DESCRIPTION: glycine amino N through a methylenecarbonyl linker"  
US-09-349-532-51  
Query Match 2.9%; Score 13; DB 1; Length 13;  
Best Local Similarity 100.0%; Pred. No. 1.7e+02;  
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Oy 38 TTTTGTCTAAC 50  
Db 13 TTTTGTCTAAC 1  
RESULT 208  
US-09-349-532-52/c  
Sequence 52, Application US/09349532  
Patent No. 6294650  
GENERAL INFORMATION:  
APPLICANT: Shay, Jerry W.  
APPLICANT: Wright, Woodring E.  
APPLICANT: Piatyszek, Mieczyslaw A.  
APPLICANT: Corey, David R.  
APPLICANT: No. 6294650ton, James C.  
TITLE OF INVENTION: Modulation of Mammalian Telomerase by  
TITLE OF INVENTION: Peptide Nucleic Acids  
NUMBER OF SEQUENCES: 60

CORRESPONDENCE ADDRESS:  
ADDRESSEE: Townsend and Townsend and Crew LLP  
STREET: Two Embarcadero Center, Eighth Floor  
CITY: San Francisco  
STATE: California  
COUNTRY: USA  
ZIP: 94111-3834  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/09/349,532  
FILING DATE:  
CLASSIFICATION:  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/838,545  
FILING DATE: 09-APR-1997  
APPLICATION NUMBER: US 08/630,019  
FILING DATE: 09-APR-1996  
ATTORNEY/AGENT INFORMATION:  
NAME: Storella, John R.  
REGISTRATION NUMBER: 32,944  
REFERENCE/DOCKET NUMBER: 015389-001610US  
TELEPHONE: (415) 576-0200  
TELEFAX: (415) 576-0300  
INFORMATION FOR SEQ ID NO: 52:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 13 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: other nucleic acid  
DESCRIPTION: /desc = "peptide nucleic acid (PNA),  
DESCRIPTION: where (deoxy(ribose-phosphate linkages are replaced by  
DESCRIPTION: N-(2-aminoethyl)glycine units linked to nucleotide bases via  
DESCRIPTION: glycine amino N through a methylenecarbonyl linker"  
US-09-349-532-52  
Query Match 2.9%; Score 13; DB 1; Length 13;  
Best Local Similarity 100.0%; Pred. No. 1.7e+02;  
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Oy 39 TTTTGTCTAAC 51  
Db 13 TTTTGTCTAAC 1  
RESULT 209  
US-09-349-532-55/c  
Sequence 55, Application US/09349532  
Patent No. 6294650  
GENERAL INFORMATION:  
APPLICANT: Shay, Jerry W.  
APPLICANT: Wright, Woodring E.  
APPLICANT: Piatyszek, Mieczyslaw A.  
APPLICANT: Corey, David R.  
APPLICANT: No. 6294650ton, James C.  
TITLE OF INVENTION: Modulation of Mammalian Telomerase by  
TITLE OF INVENTION: Peptide Nucleic Acids  
NUMBER OF SEQUENCES: 60  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Townsend and Townsend and Crew LLP  
STREET: Two Embarcadero Center, Eighth Floor  
CITY: San Francisco  
STATE: California  
COUNTRY: USA  
ZIP: 94111-3834  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/09/349,532

FILING DATE: 09-APR-1996  
CLASSIFICATION:

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 08/838,545

FILING DATE: 09-APR-1997

APPLICATION NUMBER: US 08/630,019

FILING DATE: 09-APR-1996

ATTORNEY/AGENT INFORMATION:

NAME: Storella, John R.

REGISTRATION NUMBER: 32,944

REFERENCE/DOCKET NUMBER: 015389-001610US

TELEPHONE: (415) 576-0200

TELEFAX: (415) 576-0300

INFORMATION FOR SEQ ID NO: 55:

SEQUENCE CHARACTERISTICS:

LENGTH: 13 base pairs

TYPE: nucleic acid

STRANDEDNESS: single

TOPOLOGY: linear

MOLECULE TYPE: other nucleic acid

DESCRIPTION: /desc = "peptide nucleic acid (PNA),

DESCRIPTION: where (deoxy(ribose-phosphate linkages are replaced by

DESCRIPTION: N-(2-aminoethyl)glycine units linked to nucleotide bases via

DESCRIPTION: glycine amino N through a methylenecarbonyl linker"

US-09-349-532-55

Query Match 2.9%; Score 13; DB 1; Length 13;  
Best Local Similarity 100.0%; Pred. No. 1.7e+02;  
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 53 TAACTGAGAGGG 65

Db 13 TAACTGAGAGGG 1

RESULT 210

US-09-349-532-56/c

Sequence 56, Application US/09349532

Patent No. 6294650

GENERAL INFORMATION:

APPLICANT: Shay, Jerry W.

APPLICANT: Wright, Woodring E.

APPLICANT: Piatyzek, Mieczyslaw A.

APPLICANT: Corey, David R.

APPLICANT: No. 6294650ton, James C.

TITLE OF INVENTION: Modulation of Mammalian Telomerase by

TITLE OF INVENTION: Peptide Nucleic Acids

NUMBER OF SEQUENCES: 60

CORRESPONDENCE ADDRESS:

ADDRESSEE: Townsend and Townsend and Crew LLP

STREET: Two Embarcadero Center, Eighth Floor

CITY: San Francisco

STATE: California

COUNTRY: USA

ZIP: 94111-3834

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: PatentIn Release #1.0, Version #1.30

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/09/349,532

FILING DATE:

CLASSIFICATION:

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 08/838,545

FILING DATE: 09-APR-1997

APPLICATION NUMBER: US 08/630,019

FILING DATE: 09-APR-1996  
ATTORNEY/AGENT INFORMATION:  
NAME: Storella, John R.  
REGISTRATION NUMBER: 32,944  
REFERENCE/DOCKET NUMBER: 015389-001610US

TELEPHONE: (415) 576-0200

TELEFAX: (415) 576-0300

INFORMATION FOR SEQ ID NO: 56:

SEQUENCE CHARACTERISTICS:

LENGTH: 13 base pairs

TYPE: nucleic acid

STRANDEDNESS: single

TOPOLOGY: linear

MOLECULE TYPE: other nucleic acid

DESCRIPTION: /desc = "peptide nucleic acid (PNA),

DESCRIPTION: where (deoxy(ribose-phosphate linkages are replaced by

DESCRIPTION: N-(2-aminoethyl)glycine units linked to nucleotide bases via

DESCRIPTION: glycine amino N through a methylenecarbonyl linker"

US-09-349-532-56

Query Match 2.9%; Score 13; DB 1; Length 13;  
Best Local Similarity 100.0%; Pred. No. 1.7e+02;  
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 55 ACTGAGAGGGCG 67

Db 13 ACTGAGAGGGCG 1

RESULT 211

US-09-657-445A-2/c

Sequence 2, Application US/09657445A

Patent No. 6608036

GENERAL INFORMATION:

APPLICANT: Geron Corporation

APPLICANT: Gryaznov, Sergei

APPLICANT: Pongracz, Krisztina

APPLICANT: Matray, Tracey

TITLE OF INVENTION: Oligonucleotide N3'-P5' Thiophosphoramidates: Their Synthesis and

FILE REFERENCE: 039/003

CURRENT APPLICATION NUMBER: US/09/657,445A

CURRENT FILING DATE: 2000-09-09

PRIOR APPLICATION NUMBER: US 60/153,201

PRIOR FILING DATE: 1999-09-10

PRIOR APPLICATION NUMBER: US 60/160,444

PRIOR FILING DATE: 1999-10-19

NUMBER OF SEQ ID NOS: 9

SOFTWARE: PatentIn version 3.1

SEQ ID NO 2

LENGTH: 13

TYPE: DNA

ORGANISM: Artificial Sequence

FEATURE:

OTHER INFORMATION: Synthetic oligonucleotide with potential inhibition activity

US-09-657-445A-2

Query Match 2.9%; Score 13; DB 1; Length 13;  
Best Local Similarity 100.0%; Pred. No. 1.7e+02;  
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 42 TTGTCTAACCCCTA 54

Db 13 TTGTCTAACCCCTA 1

RESULT 212

US-09-657-445A-8/c

Sequence 8, Application US/09657445A

Patent No. 6608036

GENERAL INFORMATION:

APPLICANT: Geron Corporation

APPLICANT: Gryaznov, Sergei

```
; APPLICANT: Pongracz, Krisztina
; APPLICANT: Matray, Tracey
; TITLE OF INVENTION: Oligonucleotide N3'-P5' Thiophosphoramidates: Their Synthesis and
; FILE REFERENCE: 039/003
; CURRENT APPLICATION NUMBER: US/09/657,445A
; CURRENT FILING DATE: 2000-09-09
; PRIOR APPLICATION NUMBER: US 60/153,201
; PRIOR FILING DATE: 1999-09-10
; PRIOR APPLICATION NUMBER: US 60/160,444
; PRIOR FILING DATE: 1999-10-19
; NUMBER OF SEQ ID NOS: 9
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 8
; LENGTH: 13
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide with potential inhibition activity
US-09-657-445A-8

Query Match          2.9%  Score 13;  DB 1;  Length 13;
Best Local Similarity 100.0%;  Pred. No. 1.7e+02;
Matches 13;  Conservative 0;  Mismatches 0;  Indels 0;  Gaps 0;

Qy      46 CTAACCCCTAACTG 58
Db      13 CTAACCCCTAACTG 1

RESULT 213
US-10-463-076-2/c
; Sequence 2, Application US/10463076
; Patent No. 6835826
; GENERAL INFORMATION:
; APPLICANT: Geron Corporation
; APPLICANT: Gryaznov, Sergei
; APPLICANT: Pongracz, Krisztina
; APPLICANT: Matray, Tracey
; TITLE OF INVENTION: Oligonucleotide N3'-P5' Thiophosphoramidates: Their Synthesis and
; FILE REFERENCE: 039/004C
; CURRENT APPLICATION NUMBER: US/10/463,076
; CURRENT FILING DATE: 2003-06-17
; PRIOR APPLICATION NUMBER: US 09/657,445
; PRIOR FILING DATE: 2000-09-08
; PRIOR APPLICATION NUMBER: US 60/153,201
; PRIOR FILING DATE: 1999-09-10
; PRIOR APPLICATION NUMBER: US 60/160,444
; PRIOR FILING DATE: 1999-10-19
; NUMBER OF SEQ ID NOS: 9
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 2
; LENGTH: 13
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide with potential inhibition activity
US-10-463-076-2

Query Match          2.9%  Score 13;  DB 1;  Length 13;
Best Local Similarity 100.0%;  Pred. No. 1.7e+02;
Matches 13;  Conservative 0;  Mismatches 0;  Indels 0;  Gaps 0;

Qy      42 TTGCTAACCCCTA 54
Db      13 TTGCTAACCCCTA 1

RESULT 214
US-10-463-076-8/c
; Sequence 8, Application US/10463076
; Patent No. 6835826
; GENERAL INFORMATION:
; APPLICANT: Geron Corporation
```

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; APPLICANT: Gryaznov, Sergei
; APPLICANT: Pongracz, Krisztina
; APPLICANT: Matray, Tracey
; TITLE OF INVENTION: Oligonucleotide N3'-P5' Thiophosphoramidates: Their Synthesis and
; FILE REFERENCE: 039/004C
; CURRENT APPLICATION NUMBER: US/10/463,076
; CURRENT FILING DATE: 2003-06-17
; PRIOR APPLICATION NUMBER: US 09/657,445
; PRIOR FILING DATE: 2000-09-08
; PRIOR APPLICATION NUMBER: US 60/153,201
; PRIOR FILING DATE: 1999-09-10
; PRIOR APPLICATION NUMBER: US 60/160,444
; PRIOR FILING DATE: 1999-10-19
; NUMBER OF SEQ ID NOS: 9
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 8
; LENGTH: 13
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide with potential inhibition activity
US-10-463-076-8

Query Match          2.9%  Score 13;  DB 1;  Length 13;
Best Local Similarity 100.0%;  Pred. No. 1.7e+02;
Matches 13;  Conservative 0;  Mismatches 0;  Indels 0;  Gaps 0;

Qy      46 CTAACCCCTAACTG 58
Db      13 CTAACCCCTAACTG 1

RESULT 215
US-08-301-435-34
; Sequence 34, Application US/08301435
; Patent No. 6592873
; GENERAL INFORMATION:
; APPLICANT: PAUL, PREM S.
; APPLICANT: MENG, XIANG-JIN
; APPLICANT: HALBUR, PATRICK G.
; APPLICANT: MOROZOV, IGOR
; APPLICANT: LUM, MELISSA A.
; TITLE OF INVENTION: A POLYNUCLEIC ACID ISOLATED FROM A
; TITLE OF INVENTION: PORCINE REPRODUCTIVE AND RESPIRATORY SYNDROME VIRUS (PRRSV),
; TITLE OF INVENTION: A PROTEIN ENCODED BY THE POLYNUCLEIC ACID, A VACCINE
; TITLE OF INVENTION: PREPARED FROM OR CONTAINING THE POLYNUCLEIC ACID OR
; TITLE OF INVENTION: PROTEIN,
; NUMBER OF SEQUENCES: 77
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT,
; ADDRESSEE: P.C.
; STREET: 1755 S. Jefferson Davis Highway, Suite 400
; CITY: Arlington
; STATE: Virginia
; COUNTRY: U.S.A.
; ZIP: 22202
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/301,435
; FILING DATE:
; CLASSIFICATION: 424
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/131,625
; FILING DATE: 05-OCT-1993
; ATTORNEY/AGENT INFORMATION:
; NAME: Lavalleye, Jean-Paul M.P.
; REGISTRATION NUMBER: 31,451
; REFERENCE/DOCKET NUMBER: 4625-021-55X CIP
; TELECOMMUNICATION INFORMATION:
```

/ TELEPHONE: (703) 413-3000  
/ TELEFAX: (703) 413-2220  
/ TELEX: 248855 OPAT UR  
/ INFORMATION FOR SEQ ID NO: 34:  
/ SEQUENCE CHARACTERISTICS:  
/ LENGTH: 16 base pairs  
/ TYPE: nucleic acid  
/ STRANDEDNESS: unknown  
/ TOPOLOGY: linear  
/ MOLECULE TYPE: DNA (genomic)  
US-08-301-435-34

Query Match 2.9%; Score 13; DB 1; Length 16;  
Best Local Similarity 100.0%; Pred. No. 2.1e+02;  
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 268 GGGGCTTCTCCGG 280  
Db 4 GGGGCTTCTCCGG 16

## RESULT 216

PCT-US95-10904-34

/ Sequence 34, Application PC/TUS9510904  
/ GENERAL INFORMATION:  
/ APPLICANT: PAUL, PREM S.  
/ APPLICANT: MENG, XIANG-JIN  
/ APPLICANT: HALBUR, PATRICK G.  
/ APPLICANT: MOROZOV, IGOR  
/ APPLICANT: LUM, MELISSA A.  
/ TITLE OF INVENTION: A POLYNUCLEIC ACID ISOLATED FROM A  
/ TITLE OF INVENTION: PORCINE REPRODUCTIVE AND RESPIRATORY SYNDROME VIRUS (PRRSV),  
/ TITLE OF INVENTION: A PROTEIN ENCODED BY THE POLYNUCLEIC ACID, A VACCINE  
/ TITLE OF INVENTION: PREPARED FROM OR CONTAINING THE POLYNUCLEIC ACID OR  
/ TITLE OF INVENTION: PROTEIN,  
/ NUMBER OF SEQUENCES: 77  
/ CORRESPONDENCE ADDRESS:  
/ ADDRESSEE: OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT,  
/ ADDRESSEE: P.C.  
/ STREET: 1755 S. Jefferson Davis Highway, Suite 400  
/ CITY: Arlington  
/ STATE: Virginia  
/ COUNTRY: U.S.A.  
/ ZIP: 22202

/ COMPUTER READABLE FORM:  
/ MEDIUM TYPE: Floppy disk  
/ COMPUTER: IBM PC compatible  
/ OPERATING SYSTEM: PC-DOS/MS-DOS  
/ SOFTWARE: PatentIn Release #1.0, Version #1.25  
/ CURRENT APPLICATION DATA:  
/ APPLICATION NUMBER: PCT/US95/10904  
/ FILING DATE:  
/ CLASSIFICATION:  
/ PRIOR APPLICATION DATA:  
/ APPLICATION NUMBER: US 08/131,625  
/ FILING DATE: 05-OCT-1993  
/ ATTORNEY/AGENT INFORMATION:  
/ NAME: Lavalleye, Jean-Paul M.P.  
/ REGISTRATION NUMBER: 31,451  
/ REFERENCE/DOCKET NUMBER: 4625-021-55X CIP  
/ TELECOMMUNICATION INFORMATION:  
/ TELEPHONE: (703) 413-3000  
/ TELEFAX: (703) 413-2220  
/ TELEX: 248855 OPAT UR

/ INFORMATION FOR SEQ ID NO: 34:  
/ SEQUENCE CHARACTERISTICS:  
/ LENGTH: 16 base pairs  
/ TYPE: nucleic acid  
/ STRANDEDNESS: unknown  
/ TOPOLOGY: linear  
/ MOLECULE TYPE: DNA (genomic)  
PCT-US95-10904-34

Query Match 2.9%; Score 13; DB 1; Length 16;  
Best Local Similarity 100.0%; Pred. No. 2.1e+02;  
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 268 GGGGCTTCTCCGG 280  
Db 4 GGGGCTTCTCCGG 16

## RESULT 217

US-08-679-645-828  
/ Sequence 828, Application US/08679645  
/ Patent No. 6350934  
/ GENERAL INFORMATION:  
/ APPLICANT: Zwick, Michael G.  
/ APPLICANT: Edington, Brent E.  
/ APPLICANT: McSwiggen, James A.  
/ APPLICANT: Merlo, Patricia Ann Owens  
/ APPLICANT: Guo, Lining  
/ APPLICANT: Skokut, Thomas A.  
/ APPLICANT: Young, Scott A.  
/ APPLICANT: Folkerts, Otto  
/ APPLICANT: Merlo, Donald J.  
/ TITLE OF INVENTION: COMPOSITION AND METHODS FOR  
/ TITLE OF INVENTION: MODULATION OF GENE EXPRESSION  
/ TITLE OF INVENTION: IN PLANTS  
/ NUMBER OF SEQUENCES: 1263  
/ CORRESPONDENCE ADDRESS:  
/ ADDRESSEE: Lyon & Lyon  
/ STREET: 633 West Fifth Street  
/ STREET: Suite 4700  
/ CITY: Los Angeles  
/ STATE: California  
/ COUNTRY: U.S.A.  
/ ZIP: 90071-2066

/ COMPUTER READABLE FORM:  
/ MEDIUM TYPE: 3.5" Diskette, 1.44 Mb  
/ MEDIUM TYPE: storage  
/ COMPUTER: IBM Compatible  
/ OPERATING SYSTEM: IBM P.C. DOS 5.0  
/ SOFTWARE: Word Perfect 5.1  
/ CURRENT APPLICATION DATA:  
/ APPLICATION NUMBER: US/08/679,645  
/ FILING DATE: July 12, 1996  
/ CLASSIFICATION: 800  
/ PRIOR APPLICATION DATA:  
/ APPLICATION NUMBER: 60/001,135  
/ FILING DATE: July 13, 1995  
/ APPLICATION NUMBER: 08/300,726  
/ FILING DATE: September 2, 1994  
/ ATTORNEY/AGENT INFORMATION:  
/ NAME: Warburg, Richard J.  
/ REGISTRATION NUMBER: 32,327  
/ REFERENCE/DOCKET NUMBER: 219/247  
/ TELECOMMUNICATION INFORMATION:  
/ TELEPHONE: (213) 489-1600  
/ TELEFAX: (213) 955-0440  
/ TELEX: 67-3510

/ INFORMATION FOR SEQ ID NO: 828:  
/ SEQUENCE CHARACTERISTICS:  
/ LENGTH: 17 base pairs  
/ TYPE: nucleic acid  
/ STRANDEDNESS: single  
/ TOPOLOGY: linear  
US-08-679-645-828

Query Match 2.8%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 62.5%; Pred. No. 2.2e+02;  
Matches 10; Conservative 4; Mismatches 2; Indels 0; Gaps 0;

Qy 107 GCTGACTTTCAGGGG 122  
Db 1 GCUGCCUUCAGCUGG 16

RESULT 218  
US-09-220-510B-1  
; Sequence 1, Application US/09220510B  
; Patent No. 6440726  
; GENERAL INFORMATION:  
; APPLICANT: RESNICK, NITZAN  
; TITLE OF INVENTION: EXPRESSION VECTORS COMPRISING MULTIPLE SHEAR STRESS  
; TITLE OF INVENTION: RESPONSIVE ELEMENTS (SSRE) AND METHODS OF USE FOR  
; TITLE OF INVENTION: TREATING DISORDERS RELATED TO VASCULOGENESIS AND/OR  
; TITLE OF INVENTION: ANGIOGENESIS IN A SHEAR STRESS ENVIRONMENT  
; FILE REFERENCE: P-2771-US  
; CURRENT APPLICATION NUMBER: US/09/220,510B  
; CURRENT FILING DATE: 1998-12-24  
; NUMBER OF SEQ ID NOS: 6  
; SOFTWARE: PatentIn Ver. 2.1  
; SEQ ID NO 1  
; LENGTH: 17  
; TYPE: DNA  
; ORGANISM: Artificial sequence  
; FEATURE:  
; OTHER INFORMATION: Description of Artificial sequence:  
; OTHER INFORMATION: A PDGF-A Shear Stress Response Element.  
US-09-220-510B-1  
Query Match 2.8%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 87.5%; Pred. No. 2.2e+02;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 333 GGGGGCGAGCGGAGG 348  
DB 1 GGGGGCGGGGCGGGG 16  
RESULT 219  
US-08-770-565-2  
; Sequence 2, Application US/08770565  
; Patent No. 5846723  
; GENERAL INFORMATION:  
; APPLICANT: Kim, Nam Woo  
; APPLICANT: Wu, Fred  
; APPLICANT: Kealey, James T.  
; APPLICANT: Pruzan, Ronald  
; APPLICANT: Weinrich, Scott L.  
; TITLE OF INVENTION: Methods for Detecting the RNA Component of  
; TITLE OF INVENTION: Telomerase  
; NUMBER OF SEQUENCES: 26  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: TOWNSEND and TOWNSEND and CREW LLP  
; STREET: Two Embarcadero Center, 8th Floor  
; CITY: San Francisco  
; STATE: California  
; COUNTRY: USA  
; ZIP: 94111-3834  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/770,565  
; FILING DATE: 20-DEC-1996  
; CLASSIFICATION: 435  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Storella, John R.  
; REGISTRATION NUMBER: 32,944  
; REFERENCE/DOCKET NUMBER: 015389-0023000US  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: 415-576-0200  
; TELEFAX: 415-576-0300  
; INFORMATION FOR SEQ ID NO: 2:  
; SEQUENCE CHARACTERISTICS:

; LENGTH: 30 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: DNA  
US-08-770-565-2  
Query Match 2.8%; Score 12.8; DB 1; Length 30;  
Best Local Similarity 70.8%; Pred. No. 2.9e+02;  
Matches 17; Conservative 0; Mismatches 7; Indels 0; Gaps 0;  
QY 131 CCTCGCGCTCGCGCTTCACCGT 154  
DB 5 CCTCTCTCTCGCGCTCGGAACGGT 28  
RESULT 220  
US-08-873-709-20  
; Sequence 20, Application US/08873709  
; Patent No. 6037126  
; GENERAL INFORMATION:  
; APPLICANT: Grossman, Abraham  
; TITLE OF INVENTION: COMPOSITIONS, METHODS, KITS AND  
; TITLE OF INVENTION: APPARATUS FOR DETERMINING THE PRESENCE OR ABSENCE OF  
; TITLE OF INVENTION: PROTEIN COMPONENT OF TELOMERASE ENZYME  
; NUMBER OF SEQUENCES: 25  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Abraham Grossman  
; STREET: 666 Washington Avenue  
; CITY: Pleasantville  
; STATE: NY  
; COUNTRY: USA  
; ZIP: 10570  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/873,709  
; FILING DATE: 12-JUN-1997  
; CLASSIFICATION: 435  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Janiuk, Anthony J.  
; REGISTRATION NUMBER: 29,809  
; REFERENCE/DOCKET NUMBER: Q001/002  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: 914-747-9108  
; INFORMATION FOR SEQ ID NO: 20:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 62 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: DNA  
US-08-873-709-20  
Query Match 2.8%; Score 12.8; DB 1; Length 62;  
Best Local Similarity 70.8%; Pred. No. 1.7e+02;  
Matches 17; Conservative 0; Mismatches 7; Indels 0; Gaps 0;  
QY 222 TCGCCTGCGCCGAGCCCGGAAACCC 245  
DB 38 TCCGAGGCCCGCCCGGCAACCC 61  
RESULT 221  
US-09-255-464B-16  
; Sequence 16, Application US/09255464B  
; Patent No. 6238867  
; GENERAL INFORMATION:  
; APPLICANT: Roninson, Igor  
; APPLICANT: Grossman, Abraham

```
; TITLE OF INVENTION: Compositions, Methods, Kits and Apparatus for
; TITLE OF INVENTION: Identifying Naturally Occurring RNA Sequences Having
; TITLE OF INVENTION: Affinity for RNA-Binding Proteins
; FILE REFERENCE: Q001/004a
; CURRENT APPLICATION NUMBER: US/09/255,464B
; CURRENT FILING DATE: 1999-02-22
; PRIOR APPLICATION NUMBER: 60/075,495
; PRIOR FILING DATE: 1998-02-23
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 16
; LENGTH: 62
; TYPE: DNA
; ORGANISM: Homo sapiens
; US-09-255-464B-16

Query Match          2.8%; Score 12.8; DB 1; Length 62;
Best Local Similarity 70.8%; Pred. No. 1.7e+02;
Matches 17; Conservative 0; Mismatches 7; Indels 0; Gaps 0;

QY      222 TCGCTGCGCCAGCCCGCAACCCC 245
Db      38  TCCAGGCCCGCCACCTCCGCAACCC 61

RESULT 222
US-08-873-709-19/c
; Sequence 19, Application US/08873709
; Patent No. 6037126
; GENERAL INFORMATION:
; APPLICANT: Grossman, Abraham
; TITLE OF INVENTION: COMPOSITIONS, METHODS, KITS AND
; TITLE OF INVENTION: APPARATUS FOR DETERMINING THE PRESENCE OR ABSENCE OF
; TITLE OF INVENTION: PROTEIN COMPONENT OF TELOMERASE ENZYME
; NUMBER OF SEQUENCES: 25
; CORRESPONDENCE ADDRESSES:
; ADDRESSEE: Abraham Grossman
; STREET: 666 Washington Avenue
; CITY: Pleasantville
; STATE: NY
; COUNTRY: USA
; ZIP: 10570
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/873,709
; FILING DATE: 12-JUN-1997
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Janiuk, Anthony J.
; REGISTRATION NUMBER: 29,809
; REFERENCE/DOCKET NUMBER: Q001/002
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 914-747-9108
; INFORMATION FOR SEQ ID NO: 19:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 66 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
; US-08-873-709-19

Query Match          2.8%; Score 12.8; DB 1; Length 66;
Best Local Similarity 70.8%; Pred. No. 1.6e+02;
Matches 17; Conservative 0; Mismatches 7; Indels 0; Gaps 0;

QY      222 TCGCTGCGCCAGCCCGCAACCCC 245
Db      29  TCCAGGCCCGCCACCTCCGCAACCC 6

TITLE OF INVENTION: Compositions, Methods, Kits and Apparatus for
TITLE OF INVENTION: Identifying Naturally Occurring RNA Sequences Having
FILE REFERENCE: Q001/004a
CURRENT APPLICATION NUMBER: US/09/255,464B
CURRENT FILING DATE: 1999-02-22
PRIOR APPLICATION NUMBER: 60/075,495
PRIOR FILING DATE: 1998-02-23
NUMBER OF SEQ ID NOS: 25
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 15
LENGTH: 66
TYPE: DNA
ORGANISM: Homo sapiens
US-09-255-464B-15

Query Match          2.8%; Score 12.8; DB 1; Length 66;
Best Local Similarity 70.8%; Pred. No. 1.6e+02;
Matches 17; Conservative 0; Mismatches 7; Indels 0; Gaps 0;

QY      222 TCGCTGCGCCAGCCCGCAACCCC 245
Db      29  TCCAGGCCCGCCACCTCCGCAACCC 6

RESULT 224
US-08-311-486C-658/c
; Sequence 658, Application US/08311486C
; Patent No. 5811300
; GENERAL INFORMATION:
; APPLICANT: Sean Sullivan
; APPLICANT: Kenneth Draper
; APPLICANT: Kevin Kisich
; APPLICANT: Dan T. Stinchcomb
; APPLICANT: James McSwiggen
; TITLE OF INVENTION: RIBOZYME TREATMENT OF
; TITLE OF INVENTION: DISEASES OR CONDITIONS
; TITLE OF INVENTION: RELATED TO LEVELS OF
; TITLE OF INVENTION: TNF-
; NUMBER OF SEQUENCES: 1157
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Lyon & Lyon
; STREET: 633 West Fifth Street
; CITY: Suite 4700
; CITY: Los Angeles
; STATE: California
; COUNTRY: U.S.A.
; ZIP: 90071-2066
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
; COMPUTER: IBM compatible
; OPERATING SYSTEM: IBM P.C. DOS 5.0
; SOFTWARE: Word Perfect 5.1
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/311,486C
; FILING DATE: September 23, 1994
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA: including application
; PRIOR APPLICATION DATA: described below:
; APPLICATION NUMBER: 08/008,895
; FILING DATE: January 19, 1993
; APPLICATION NUMBER: 07/989,849
; two
```



```
; FILING DATE: December 7, 1992
; ATTORNEY/AGENT INFORMATION:
; NAME: Warburg, Richard J.
; REGISTRATION NUMBER: 32,327
; REFERENCE/DOCKET NUMBER: 209/166
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (213) 489-1600
; TELEFAX: (213) 955-0440
; TELEX: 67-3510
; INFORMATION FOR SEQ ID NO: 658:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 15 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; US-08-311-486C-658

Query Match      2.7%; Score 12.4; DB 1; Length 15;
Best Local Similarity 92.9%; Pred. No. 2.1e+02;
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 302 AGAGTTGGGCTCTG 315
Db 15 AGAGTTGGACTCTG 2

RESULT 225
US-09-328-174A-38/c
; Sequence 38, Application US/09328174A
; Patent No. 6448003
; GENERAL INFORMATION:
; APPLICANT: Guida, Marco
; APPLICANT: Kurth, Janice
; TITLE OF INVENTION: Genotyping Human Phenol Sulfotransferase
; FILE REFERENCE: 4389-6 (formerly SEQ-16P)
; CURRENT APPLICATION NUMBER: US/09/328,174A
; CURRENT FILING DATE: 1999-06-08
; PRIOR APPLICATION NUMBER: 09/328,174
; PRIOR FILING DATE: 1999-06-08
; NUMBER OF SEQ ID NOS: 110
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 38
; LENGTH: 16
; TYPE: DNA
; ORGANISM: H. sapiens
US-09-328-174A-38

Query Match      2.7%; Score 12.4; DB 1; Length 16;
Best Local Similarity 92.9%; Pred. No. 2.3e+02;
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 24 AGGGGTGGTGCCCA 37
Db 14 AGGGGTGGTGCTTA 1

RESULT 226
US-08-770-565-4/c
; Sequence 4, Application US/08770565
; Patent No. 5846723
; GENERAL INFORMATION:
; APPLICANT: Kim, Nam Woo
; APPLICANT: Wu, Fred
; APPLICANT: Kealey, James T.
; APPLICANT: Pruzan, Ronald
; APPLICANT: Weinrich, Scott L.
; TITLE OF INVENTION: Methods for Detecting the RNA Component of
; TITLE OF INVENTION: Telomerase
; NUMBER OF SEQUENCES: 26
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: TOWNSEND and TOWNSEND and CREW LLP
; STREET: Two Embarcadero Center, 8th Floor
```

```
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/770,565
; FILING DATE: 20-DEC-1996
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-002300US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 415-576-0200
; TELEFAX: 415-576-0300
; INFORMATION FOR SEQ ID NO: 4:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 12 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
; US-08-770-565-4

Query Match      2.7%; Score 12; DB 1; Length 12;
Best Local Similarity 100.0%; Pred. No. 1.8e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 369 GGAAGAGGAACG 380
Db 12 GGAAGAGGAACG 1

RESULT 227
US-08-630-019A-10/c
; Sequence 10, Application US/08630019A
; Patent No. 6015710
; GENERAL INFORMATION:
; APPLICANT: Shay, Jerry W.
; APPLICANT: Wright, Woodring E.
; APPLICANT: Piatyszek, Mieczyslaw A.
; APPLICANT: Corey, David
; APPLICANT: No. 6015710ton, James C.
; TITLE OF INVENTION: Modulation of Mammalian Telomerase by
; TITLE OF INVENTION: Peptide Nucleic Acids
; NUMBER OF SEQUENCES: 46
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/630,019A
; FILING DATE: 09-JUN-1996
; CLASSIFICATION: 536
; ATTORNEY/AGENT INFORMATION:
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-001600US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
```

TELEFAX: (415) 576-0300  
INFORMATION FOR SEQ ID NO: 10:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 12 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: other nucleic acid  
DESCRIPTION: /desc = "peptide nucleic acid (PNA),  
where (deoxy)ribose-phosphate linkages are replaced by  
N-(2-aminoethyl)glycine units linked to nucleotide bases via  
glycine amino nitrogen through a methylenecarbonyl linker"  
US-08-630-019A-10

Query Match 2.7%; Score 12; DB 1; Length 12;  
Best Local Similarity 100.0%; Pred. No. 1.8e+02;  
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 46 CTAACCCCTAACT 57  
Db 12 CTAACCCCTAACT 1

## RESULT 228

US-08-838-545-8/c  
Sequence 8, Application US/08838545  
Patent No. 6046307  
GENERAL INFORMATION:  
APPLICANT: Shay, Jerry W.  
APPLICANT: Wright, Woodring E.  
APPLICANT: Piatyszek, Mieczyslaw A.  
APPLICANT: Corey, David R.  
APPLICANT: No. 6046307ton, James C.  
TITLE OF INVENTION: Modulation of Mammalian Telomerase by  
TITLE OF INVENTION: Peptide Nucleic Acids  
NUMBER OF SEQUENCES: 60  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Townsend and Townsend and Crew LLP  
STREET: Two Embarcadero Center, Eighth Floor  
CITY: San Francisco  
STATE: California  
COUNTRY: USA  
ZIP: 94111-3834  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/838,545  
FILING DATE: 09-APR-1997  
CLASSIFICATION: 536  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/630,019  
FILING DATE: 09-APR-1996  
ATTORNEY/AGENT INFORMATION:  
NAME: Storella, John R.  
REGISTRATION NUMBER: 32,944  
REFERENCE/DOCKET NUMBER: 015389-001610US  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (415) 576-0200  
TELEFAX: (415) 576-0300  
INFORMATION FOR SEQ ID NO: 8:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 12 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: other nucleic acid  
DESCRIPTION: /desc = "peptide nucleic acid (PNA),  
where (deoxy)ribose-phosphate linkages are replaced by  
N-(2-aminoethyl)glycine units linked to nucleotide bases via  
glycine amino N through a methylenecarbonyl linker"

US-08-838-545-8  
Sequence 8, Application US/09349532  
Patent No. 6294650  
GENERAL INFORMATION:  
APPLICANT: Shay, Jerry W.  
APPLICANT: Wright, Woodring E.  
APPLICANT: Piatyszek, Mieczyslaw A.  
APPLICANT: Corey, David R.  
APPLICANT: No. 6294650ton, James C.  
TITLE OF INVENTION: Modulation of Mammalian Telomerase by  
TITLE OF INVENTION: Peptide Nucleic Acids  
NUMBER OF SEQUENCES: 60  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Townsend and Townsend and Crew LLP  
STREET: Two Embarcadero Center, Eighth Floor  
CITY: San Francisco  
STATE: California  
COUNTRY: USA  
ZIP: 94111-3834  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/09/349,532  
FILING DATE:  
CLASSIFICATION:  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/838,545  
FILING DATE: 09-APR-1997  
APPLICATION NUMBER: US 08/630,019  
FILING DATE: 09-APR-1996  
ATTORNEY/AGENT INFORMATION:  
NAME: Storella, John R.  
REGISTRATION NUMBER: 32,944  
REFERENCE/DOCKET NUMBER: 015389-001610US  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (415) 576-0200  
TELEFAX: (415) 576-0300  
INFORMATION FOR SEQ ID NO: 8:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 12 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: other nucleic acid  
DESCRIPTION: /desc = "peptide nucleic acid (PNA),  
where (deoxy)ribose-phosphate linkages are replaced by  
N-(2-aminoethyl)glycine units linked to nucleotide bases via  
glycine amino N through a methylenecarbonyl linker"

Query Match 2.7%; Score 12; DB 1; Length 12;  
Best Local Similarity 100.0%; Pred. No. 1.8e+02;  
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 46 CTAACCCCTAACT 57  
Db 12 CTAACCCCTAACT 1

US-08-838-545-8

Query Match 2.7%; Score 12; DB 1; Length 12;  
Best Local Similarity 100.0%; Pred. No. 1.8e+02;  
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 46 CTAACCCCTAACT 57  
Db 12 CTAACCCCTAACT 1

## RESULT 229

US-09-349-532-8/c  
Sequence 8, Application US/09349532  
Patent No. 6294650  
GENERAL INFORMATION:  
APPLICANT: Shay, Jerry W.  
APPLICANT: Wright, Woodring E.  
APPLICANT: Piatyszek, Mieczyslaw A.  
APPLICANT: Corey, David R.  
APPLICANT: No. 6294650ton, James C.  
TITLE OF INVENTION: Modulation of Mammalian Telomerase by  
TITLE OF INVENTION: Peptide Nucleic Acids  
NUMBER OF SEQUENCES: 60  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Townsend and Townsend and Crew LLP  
STREET: Two Embarcadero Center, Eighth Floor  
CITY: San Francisco  
STATE: California  
COUNTRY: USA  
ZIP: 94111-3834  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/09/349,532  
FILING DATE:  
CLASSIFICATION:  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/838,545  
FILING DATE: 09-APR-1997  
APPLICATION NUMBER: US 08/630,019  
FILING DATE: 09-APR-1996  
ATTORNEY/AGENT INFORMATION:  
NAME: Storella, John R.  
REGISTRATION NUMBER: 32,944  
REFERENCE/DOCKET NUMBER: 015389-001610US  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (415) 576-0200  
TELEFAX: (415) 576-0300  
INFORMATION FOR SEQ ID NO: 8:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 12 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: other nucleic acid  
DESCRIPTION: /desc = "peptide nucleic acid (PNA),  
where (deoxy)ribose-phosphate linkages are replaced by  
N-(2-aminoethyl)glycine units linked to nucleotide bases via  
glycine amino N through a methylenecarbonyl linker"

US-09-349-532-8  
Sequence 8, Application US/09349532  
Patent No. 6294650  
GENERAL INFORMATION:  
APPLICANT: Shay, Jerry W.  
APPLICANT: Wright, Woodring E.  
APPLICANT: Piatyszek, Mieczyslaw A.  
APPLICANT: Corey, David R.  
APPLICANT: No. 6294650ton, James C.  
TITLE OF INVENTION: Modulation of Mammalian Telomerase by  
TITLE OF INVENTION: Peptide Nucleic Acids  
NUMBER OF SEQUENCES: 60  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Townsend and Townsend and Crew LLP  
STREET: Two Embarcadero Center, Eighth Floor  
CITY: San Francisco  
STATE: California  
COUNTRY: USA  
ZIP: 94111-3834  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/09/349,532  
FILING DATE:  
CLASSIFICATION:  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/838,545  
FILING DATE: 09-APR-1997  
APPLICATION NUMBER: US 08/630,019  
FILING DATE: 09-APR-1996  
ATTORNEY/AGENT INFORMATION:  
NAME: Storella, John R.  
REGISTRATION NUMBER: 32,944  
REFERENCE/DOCKET NUMBER: 015389-001610US  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (415) 576-0200  
TELEFAX: (415) 576-0300  
INFORMATION FOR SEQ ID NO: 8:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 12 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: other nucleic acid  
DESCRIPTION: /desc = "peptide nucleic acid (PNA),  
where (deoxy)ribose-phosphate linkages are replaced by  
N-(2-aminoethyl)glycine units linked to nucleotide bases via  
glycine amino N through a methylenecarbonyl linker"

US-09-349-532-8  
Sequence 8, Application US/09349532  
Patent No. 6294650  
GENERAL INFORMATION:  
APPLICANT: Shay, Jerry W.  
APPLICANT: Wright, Woodring E.  
APPLICANT: Piatyszek, Mieczyslaw A.  
APPLICANT: Corey, David R.  
APPLICANT: No. 6294650ton, James C.  
TITLE OF INVENTION: Modulation of Mammalian Telomerase by  
TITLE OF INVENTION: Peptide Nucleic Acids  
NUMBER OF SEQUENCES: 60  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Townsend and Townsend and Crew LLP  
STREET: Two Embarcadero Center, Eighth Floor  
CITY: San Francisco  
STATE: California  
COUNTRY: USA  
ZIP: 94111-3834  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/09/349,532  
FILING DATE:  
CLASSIFICATION:  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/838,545  
FILING DATE: 09-APR-1997  
APPLICATION NUMBER: US 08/630,019  
FILING DATE: 09-APR-1996  
ATTORNEY/AGENT INFORMATION:  
NAME: Storella, John R.  
REGISTRATION NUMBER: 32,944  
REFERENCE/DOCKET NUMBER: 015389-001610US  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (415) 576-0200  
TELEFAX: (415) 576-0300  
INFORMATION FOR SEQ ID NO: 8:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 12 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: other nucleic acid  
DESCRIPTION: /desc = "peptide nucleic acid (PNA),  
where (deoxy)ribose-phosphate linkages are replaced by  
N-(2-aminoethyl)glycine units linked to nucleotide bases via  
glycine amino N through a methylenecarbonyl linker"

Query Match 2.7%; Score 12; DB 1; Length 12;  
Best Local Similarity 100.0%; Pred. No. 1.8e+02;  
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 46 CTAACCCCTAACT 57  
Db 12 CTAACCCCTAACT 1

## RESULT 230

US-08-292-620A-396/c  
; Sequence 396, Application US/08292620A

; Patent No. 5837542

; GENERAL INFORMATION:

; APPLICANT: Susan Grimm

; APPLICANT: Dan T. Stinchcomb

; APPLICANT: James McSwiggen

; APPLICANT: Sean Sullivan

; APPLICANT: Kenneth G. Draper

; TITLE OF INVENTION: RIBOZYME TREATMENT OF

; TITLE OF INVENTION: DISEASES OR CONDITIONS

; TITLE OF INVENTION: RELATED TO LEVELS OF

; TITLE OF INVENTION: INTRACELLULAR ADHESION

; TITLE OF INVENTION: MOLECULE-1 (I-CAM-1)

; NUMBER OF SEQUENCES: 2390

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: Lyon & Lyon

; STREET: 633 West Fifth Street

; STREET: Suite 4700

; CITY: Los Angeles

; STATE: California

; COUNTRY: U.S.A.

; ZIP: 90071-2066

; COMPUTER READABLE FORM:

; MEDIUM TYPE: 3.5" Diskette, 1.44 Mb

; MEDIUM TYPE: storage

; COMPUTER: IBM Compatible

; OPERATING SYSTEM: IBM P.C. DOS 5.0

; SOFTWARE: Word Perfect 5.1

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/08/292,620A

; FILING DATE: August 17, 1994

; CLASSIFICATION: 435

; PRIOR APPLICATION DATA:

; PRIOR APPLICATION DATA: including application

; PRIOR APPLICATION DATA: described below:

; APPLICATION NUMBER: 08/008,895

; FILING DATE: January 19, 1993

; APPLICATION NUMBER: 07/989,849

; FILING DATE: December 7, 1992

; ATTORNEY/AGENT INFORMATION:

; NAME: Warburg, Richard J.

; REGISTRATION NUMBER: 32,327

; REFERENCE/DOCKET NUMBER: 208/149

; TELECOMMUNICATION INFORMATION:

; TELEPHONE: (213) 489-1600

; TELEFAX: (213) 955-0440

; TELEX: 67-3510

; INFORMATION FOR SEQ ID NO: 396:

; SEQUENCE CHARACTERISTICS:

; LENGTH: 15 base pairs

; TYPE: nucleic acid

; STRANDEDNESS: single

; TOPOLOGY: linear

US-08-292-620A-396

Query Match 2.7%; Score 12; DB 1; Length 15;

Best Local Similarity 100.0%; Pred. No. 2.3e+02;

Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 19 CTGGGAGGGGTG 30

|||||

Db 12 CTGGGAGGGGTG 1

## RESULT 231

US-08-292-620A-591/c

; Sequence 591, Application US/08292620A

; Patent No. 5837542

; GENERAL INFORMATION:

; APPLICANT: Susan Grimm

; APPLICANT: Dan T. Stinchcomb  
; APPLICANT: James McSwiggen  
; APPLICANT: Sean Sullivan  
; APPLICANT: Kenneth G. Draper  
; TITLE OF INVENTION: RIBOZYME TREATMENT OF  
; TITLE OF INVENTION: DISEASES OR CONDITIONS  
; TITLE OF INVENTION: RELATED TO LEVELS OF  
; TITLE OF INVENTION: INTRACELLULAR ADHESION  
; TITLE OF INVENTION: MOLECULE-1 (I-CAM-1)  
; NUMBER OF SEQUENCES: 2390  
; CORRESPONDENCE ADDRESS:

; ADDRESSEE: Lyon & Lyon

; STREET: 633 West Fifth Street

; STREET: Suite 4700

; CITY: Los Angeles

; STATE: California

; COUNTRY: U.S.A.

; ZIP: 90071-2066

; COMPUTER READABLE FORM:

; MEDIUM TYPE: 3.5" Diskette, 1.44 Mb

; MEDIUM TYPE: storage

; COMPUTER: IBM Compatible

; OPERATING SYSTEM: IBM P.C. DOS 5.0

; SOFTWARE: Word Perfect 5.1

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/08/292,620A

; FILING DATE: August 17, 1994

; CLASSIFICATION: 435

; PRIOR APPLICATION DATA:

; PRIOR APPLICATION DATA: including application

; PRIOR APPLICATION DATA: described below:

; APPLICATION NUMBER: 08/008,895

; FILING DATE: January 19, 1993

; APPLICATION NUMBER: 07/989,849

; FILING DATE: December 7, 1992

; ATTORNEY/AGENT INFORMATION:

; NAME: Warburg, Richard J.

; REGISTRATION NUMBER: 32,327

; REFERENCE/DOCKET NUMBER: 208/149

; TELECOMMUNICATION INFORMATION:

; TELEPHONE: (213) 489-1600

; TELEFAX: (213) 955-0440

; TELEX: 67-3510

; INFORMATION FOR SEQ ID NO: 591:

; SEQUENCE CHARACTERISTICS:

; LENGTH: 15 base pairs

; TYPE: nucleic acid

; STRANDEDNESS: single

; TOPOLOGY: linear

US-08-292-620A-591

Query Match 2.7%; Score 12; DB 1; Length 15;

Best Local Similarity 100.0%; Pred. No. 2.3e+02;

Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 19 CTGGGAGGGGTG 30

|||||

Db 12 CTGGGAGGGGTG 1

## RESULT 232

US-09-071-845-396/c

; Sequence 396, Application US/09071845

; Patent No. 6132967

; GENERAL INFORMATION:

; APPLICANT: Susan Grimm

; APPLICANT: Dan T. Stinchcomb

; APPLICANT: James McSwiggen

; APPLICANT: Sean Sullivan

; APPLICANT: Kenneth G. Draper

; TITLE OF INVENTION: RIBOZYME TREATMENT OF

; TITLE OF INVENTION: DISEASES OR CONDITIONS

; TITLE OF INVENTION: RELATED TO LEVELS OF

two

two

;  
; TITLE OF INVENTION: INTRACELLULAR ADHESION  
; TITLE OF INVENTION: MOLECULE-1 (I-CAM-1)  
; NUMBER OF SEQUENCES: 2390  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Lyon & Lyon  
; STREET: 633 West Fifth Street  
; CITY: Suite 4700  
; STATE: Los Angeles  
; COUNTRY: California  
; ZIP: U.S.A.  
; ZIP: 90071-2066  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: 3.5" Diskette, 1.44 Mb  
; MEDIUM TYPE: storage  
; COMPUTER: IBM Compatible  
; OPERATING SYSTEM: IBM P.C. DOS 5.0  
; SOFTWARE: Word Perfect 5.1  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/09/071,845  
; FILING DATE:  
; CLASSIFICATION:  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US/08/292,620  
; FILING DATE: August 17, 1994  
; APPLICATION NUMBER: 08/008,895  
; FILING DATE: January 19, 1993  
; APPLICATION NUMBER: 07/989,849  
; FILING DATE: December 7, 1992  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Warburg, Richard J.  
; REGISTRATION NUMBER: 32,327  
; REFERENCE/DOCKET NUMBER: 208/149  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (213) 489-1600  
; TELEFAX: (213) 955-0440  
; TELEX: 67-3510  
; INFORMATION FOR SEQ ID NO: 396:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 15 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; US-09-071-845-396  
  
Query Match 2.7%; Score 12; DB 1; Length 15;  
Best Local Similarity 100.0%; Pred. No. 2.3e+02;  
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
  
QY 19 CTGGGAGGGGTG 30  
Db 12 CTGGGAGGGGTG 1  
  
RESULT 233  
US-09-071-845-591/c  
; Sequence 591, Application US/09071845  
; Patent No. 6132967  
; GENERAL INFORMATION:  
; APPLICANT: Susan Grimm  
; APPLICANT: Dan T. Stinchcomb  
; APPLICANT: James McSwiggen  
; APPLICANT: Sean Sullivan  
; APPLICANT: Kenneth G. Draper  
; TITLE OF INVENTION: RIBOZYME TREATMENT OF  
; TITLE OF INVENTION: DISEASES OR CONDITIONS  
; TITLE OF INVENTION: RELATED TO LEVELS OF  
; TITLE OF INVENTION: INTRACELLULAR ADHESION  
; TITLE OF INVENTION: MOLECULE-1 (I-CAM-1)  
; NUMBER OF SEQUENCES: 2390  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Lyon & Lyon  
; STREET: 633 West Fifth Street  
; CITY: Suite 4700

;  
; CITY: Los Angeles  
; STATE: California  
; COUNTRY: U.S.A.  
; ZIP: 90071-2066  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: 3.5" Diskette, 1.44 Mb  
; MEDIUM TYPE: storage  
; COMPUTER: IBM Compatible  
; OPERATING SYSTEM: IBM P.C. DOS 5.0  
; SOFTWARE: Word Perfect 5.1  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/09/071,845  
; FILING DATE:  
; CLASSIFICATION:  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US/08/292,620  
; FILING DATE: August 17, 1994  
; APPLICATION NUMBER: 08/008,895  
; FILING DATE: January 19, 1993  
; APPLICATION NUMBER: 07/989,849  
; FILING DATE: December 7, 1992  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Warburg, Richard J.  
; REGISTRATION NUMBER: 32,327  
; REFERENCE/DOCKET NUMBER: 208/149  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (213) 489-1600  
; TELEFAX: (213) 955-0440  
; TELEX: 67-3510  
; INFORMATION FOR SEQ ID NO: 591:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 15 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; US-09-071-845-591  
  
Query Match 2.7%; Score 12; DB 1; Length 15;  
Best Local Similarity 100.0%; Pred. No. 2.3e+02;  
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
  
QY 19 CTGGGAGGGGTG 30  
Db 12 CTGGGAGGGGTG 1  
  
RESULT 234  
US-09-081-646-720/c  
; Sequence 720, Application US/09081646  
; Patent No. 6333152  
; GENERAL INFORMATION:  
; APPLICANT: Kinzler, Kenneth  
; APPLICANT: Vogelstein, Bert  
; APPLICANT: Zhang, Lin  
; APPLICANT: Zhou, Wei  
; TITLE OF INVENTION: Gene Expression Profiles in No. 6333152mal and  
; FILE REFERENCE: Cancer Cells  
; FILE REFERENCE: 01107.74664  
; CURRENT APPLICATION NUMBER: US/09/081,646  
; CURRENT FILING DATE: 1998-05-20  
; EARLIER APPLICATION NUMBER: 60/047,352  
; EARLIER FILING DATE: 1997-05-21  
; NUMBER OF SEQ ID NOS: 871  
; SEQ ID NO 720  
; SOFTWARE: FastSeq for Windows Version 3.0  
; LENGTH: 15  
; TYPE: DNA  
; ORGANISM: Homo sapiens  
; US-09-081-646-720  
  
Query Match 2.7%; Score 12; DB 1; Length 15;  
Best Local Similarity 100.0%; Pred. No. 2.3e+02;  
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 439 GGCTCACATG 450  
Db 12 GGCTCACATG 1

## RESULT 235

US-08-050-073-112/c  
; Sequence 112, Application US/08050073  
; Patent No. 5567809  
; GENERAL INFORMATION:  
; APPLICANT: Apple, Raymond J.  
; APPLICANT: Begovich, Ann B.  
; APPLICANT: Bugawan, Teodorica L.  
; APPLICANT: Erlich, Henry A.  
; APPLICANT: Griffith, Robert L.  
; APPLICANT: Scharf, Stephen J.  
; TITLE OF INVENTION: Methods and Reagents for HLA DRbeta DNA  
; TITLE OF INVENTION: Typing  
; NUMBER OF SEQUENCES: 315  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Hoffmann-La Roche Inc.  
; STREET: 340 Kingsland Street  
; CITY: Nutley  
; STATE: New Jersey  
; COUNTRY: U.S.A.  
; ZIP: 07110  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patentin Release #1.0, Version #1.25  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/050,073  
; FILING DATE:  
; CLASSIFICATION: 435  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Petry, Douglas A.  
; REGISTRATION NUMBER: 35,321  
; REFERENCE/DOCKET NUMBER: 8769  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (510) 814-2974  
; TELEFAX: (510) 814-2977  
; INFORMATION FOR SEQ ID NO: 112:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 16 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: genomic DNA  
US-08-050-073-112

Query Match 2.7%; Score 12; DB 1; Length 16;  
Best Local Similarity 100.0%; Pred. No. 2.4e+02;  
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 430 CCAGGACTCGGC 441  
Db 16 CCAGGACTCGGC 5

## RESULT 236

US-08-679-645-515  
; Sequence 515, Application US/08679645  
; Patent No. 6350934  
; GENERAL INFORMATION:  
; APPLICANT: Zwick, Michael G.  
; APPLICANT: Edington, Brent E.  
; APPLICANT: McSwiggen, James A.  
; APPLICANT: Merlo, Patricia Ann Owens  
; APPLICANT: Guo, Lining  
; APPLICANT: Skokut, Thomas A.  
; APPLICANT: Young, Scott A.

; APPLICANT: Folkerts, Otto  
; APPLICANT: Merlo, Donald J.  
; TITLE OF INVENTION: COMPOSITION AND METHODS FOR  
; TITLE OF INVENTION: MODULATION OF GENE EXPRESSION  
; TITLE OF INVENTION: IN PLANTS  
; NUMBER OF SEQUENCES: 1263  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Lyon & Lyon  
; STREET: 633 West Fifth Street  
; CITY: Los Angeles  
; STATE: California  
; COUNTRY: U.S.A.  
; ZIP: 90071-2066  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: 3.5" Diskette, 1.44 Mb  
; MEDIUM TYPE: storage  
; COMPUTER: IBM Compatible  
; OPERATING SYSTEM: IBM P.C. DOS 5.0  
; SOFTWARE: Word Perfect 5.1  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/679,645  
; FILING DATE: July 12, 1996  
; CLASSIFICATION: 800  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: 60/001,135  
; FILING DATE: July 13, 1995  
; APPLICATION NUMBER: 08/300,726  
; FILING DATE: September 2, 1994  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Warburg, Richard J.  
; REGISTRATION NUMBER: 32,327  
; REFERENCE/DOCKET NUMBER: 219/247  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (213) 489-1600  
; TELEFAX: (213) 955-0440  
; TELEX: 67-3510  
; INFORMATION FOR SEQ ID NO: 515:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 16 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
US-08-679-645-515

Query Match 2.7%; Score 12; DB 1; Length 16;  
Best Local Similarity 91.7%; Pred. No. 2.4e+02;  
Matches 11; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 134 CGGCGTGGCGCC 145  
Db 4 CGGCGUGCGCC 15

## RESULT 237

US-08-310-501-4/c  
; Sequence 4, Application US/08310501  
; Patent No. 5567687  
; GENERAL INFORMATION:  
; APPLICANT: Magda, Darren  
; APPLICANT: Sessler, Jonathan L.  
; APPLICANT: Iverson, Brent  
; APPLICANT: Jansen, Petra I.  
; APPLICANT: Wright, Meredith  
; APPLICANT: Mody, Tarak D.  
; APPLICANT: Hemmi, Gregory W.  
; TITLE OF INVENTION: Texaphyrins and Uses Thereof  
; NUMBER OF SEQUENCES: 6  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Arnold, White & Durkee  
; STREET: P.O. Box 4433  
; CITY: Houston  
; STATE: Texas

;  
; COUNTRY: US  
; ZIP: 77210  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.25  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/310,501  
; FILING DATE: Concurrently herewith  
; CLASSIFICATION: 514  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/112,872  
; FILING DATE: 25-AUG-1993  
; APPLICATION NUMBER: PCT/US94/06284  
; FILING DATE: 09-JUN-1994  
; APPLICATION NUMBER: US 07/822,964  
; FILING DATE: 21-JAN-1992  
; APPLICATION NUMBER: US 08/227,370  
; FILING DATE: 14-APR-1994  
; APPLICATION NUMBER: US 08/075,123  
; FILING DATE: 09-JUN-1993  
; APPLICATION NUMBER: US 07/822,964  
; FILING DATE: 21-JAN-1992  
; APPLICATION NUMBER: US 07/771,393  
; FILING DATE: 30-SEP-1991  
; APPLICATION NUMBER: US 07/539,975  
; FILING DATE: 18-JUN-1990  
; APPLICATION NUMBER: PCT/US90/01208  
; FILING DATE: 06-MAR-1990  
; APPLICATION NUMBER: US 07/320,293  
; FILING DATE: 06-MAR-1989  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Parker, David L.  
; REGISTRATION NUMBER: 32,165  
; REFERENCE/DOCKET NUMBER: PHAY.034/PAR  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: 512/418-3000  
; TELEFAX: 512/474-7577  
; TELEX: n/a  
; INFORMATION FOR SEQ ID NO: 4:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 15 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: RNA (genomic)  
; US-08-310-501-4

Query Match 2.6%; Score 11.8; DB 1; Length 15;  
Best Local Similarity 86.7%; Pred. No. 2.3e+02;  
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 436 CTCGGCTCACATG 450  
Db 15 CCCGGCTCACATG 1

RESULT 238  
US-08-469-177-4/c  
; Sequence 4, Application US/08469177  
; Patent No. 5607924  
; GENERAL INFORMATION:  
; APPLICANT: MAGDA, Darren  
; APPLICANT: SESSLER, Jonathan L.  
; APPLICANT: IVERSON, Brent L.  
; APPLICANT: SANSOM, Petra I.  
; APPLICANT: WRIGHT, Meredith  
; TITLE OF INVENTION: DNA PHOTOCLEAVAGE USING TEXAPHYRINS  
; NUMBER OF SEQUENCES: 10  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Pharmacyclics, Inc.  
; STREET: 995 East Arques Avenue

;  
; CITY: Sunnyvale  
; STATE: California  
; COUNTRY: United States of America  
; ZIP: 94086  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/469,177  
; FILING DATE: 06-JUN-1995  
; CLASSIFICATION: 514  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Larson, Jacqueline S.  
; REGISTRATION NUMBER: 30,279  
; REFERENCE/DOCKET NUMBER: PHAY.057  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (408) 774-3363  
; TELEFAX: (408) 774-0340  
; INFORMATION FOR SEQ ID NO: 4:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 15 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: other nucleic acid  
; DESCRIPTION: /desc = "RNA"  
; US-08-469-177-4

Query Match 2.6%; Score 11.8; DB 1; Length 15;  
Best Local Similarity 86.7%; Pred. No. 2.3e+02;  
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 436 CTCGGCTCACATG 450  
Db 15 CCCGGCTCACATG 1

RESULT 239  
US-08-484-551-1/c  
; Sequence 1, Application US/08484551  
; Patent No. 5714328  
; GENERAL INFORMATION:  
; APPLICANT: Magda, Darren  
; APPLICANT: Sessler, Jonathan L.  
; TITLE OF INVENTION: RNA PHOTOCLEAVAGE USING TEXAPHYRINS  
; NUMBER OF SEQUENCES: 8  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Arnold, White & Durkee  
; STREET: P.O. Box 4433  
; CITY: Houston  
; STATE: Texas  
; COUNTRY: United States of America  
; ZIP: 77210  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/484,551  
; FILING DATE: Concurrently herewith  
; CLASSIFICATION: 514  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Parker, David L.  
; REGISTRATION NUMBER: 32,165  
; REFERENCE/DOCKET NUMBER: PHAY.047/PAR  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (512) 418-3000  
; TELEFAX: (512) 747-7577  
; TELEX: 79-0924  
; INFORMATION FOR SEQ ID NO: 1:

```
; SEQUENCE CHARACTERISTICS:
; LENGTH: 15 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: other nucleic acid
; DESCRIPTION: /desc = "DNA"
US-08-484-551-1

Query Match          2.6%; Score 11.8; DB 1; Length 15;
Best Local Similarity 86.7%; Pred. No. 2.3e+02;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 436 CTCGGCTCACACATG 450
Db 15 CCCGGCTCACACATG 1

RESULT 240
US-08-484-551-5/c
; Sequence 5, Application US/08484551
; Patent No. 5714328
; GENERAL INFORMATION:
; APPLICANT: Magda, Darren
; APPLICANT: Sessler, Jonathan L.
; TITLE OF INVENTION: RNA PHOTOCLEAVAGE USING TEXAPHYRINS
; NUMBER OF SEQUENCES: 8
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Arnold, White & Durkee
; STREET: P.O. Box 4433
; CITY: Houston
; STATE: Texas
; COUNTRY: United States of America
; ZIP: 77210
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/484 551
; FILING DATE: Concurrently herewith
; CLASSIFICATION: 514
; ATTORNEY/AGENT INFORMATION:
; NAME: Parker, David L.
; REGISTRATION NUMBER: 32,165
; REFERENCE/DOCKET NUMBER: PHAY:047/PAR
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (512) 418-3000
; TELEFAX: (512) 747-7577
; TELEX: 79-0924
; INFORMATION FOR SEQ ID NO: 5:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 15 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: other nucleic acid
; DESCRIPTION: /desc = "RNA"
US-08-484-551-5

Query Match          2.6%; Score 11.8; DB 1; Length 15;
Best Local Similarity 86.7%; Pred. No. 2.3e+02;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 436 CTCGGCTCACACATG 450
Db 15 CCCGGCTCACACATG 1

RESULT 241
US-08-486-962-18/c
; Sequence 18, Application US/08486962
; Patent No. 5763172
; GENERAL INFORMATION:
; APPLICANT: Magda, Darren
; APPLICANT: Sessler, Jonathan L.
; APPLICANT: Wright, Meredith
; APPLICANT: Ross, Kevin L.
; APPLICANT: Miller, Richard A.
; APPLICANT: Dow, William C.
; APPLICANT: Kral, Vladimir A.
; APPLICANT: Smith, Daniel A.
; TITLE OF INVENTION: METHOD OF PHOSPHATE ESTER HYDROLYSIS
; NUMBER OF SEQUENCES: 18
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Pharmacyclics, Inc.
; STREET: 995 E. Arques Avenue
; CITY: Sunnyvale
; STATE: California
; COUNTRY: USA
; ZIP: 94086-4521
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/486,962
; FILING DATE: 07-JUN-1995
; CLASSIFICATION: 530
; ATTORNEY/AGENT INFORMATION:
; NAME: Larson, Jacqueline S.
; REGISTRATION NUMBER: 30,279
; REFERENCE/DOCKET NUMBER: PHAY:053
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (408) 774-0330
; TELEFAX: (408) 774-0340
; INFORMATION FOR SEQ ID NO: 18:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 15 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: other nucleic acid
; DESCRIPTION: /desc = "DNA"
US-08-486-962-18

Query Match          2.6%; Score 11.8; DB 1; Length 15;
Best Local Similarity 86.7%; Pred. No. 2.3e+02;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 436 CTCGGCTCACACATG 450
Db 15 CCCGGCTCACACATG 1

RESULT 242
US-08-323-192D-11
; Sequence 11, Application US/08323192D
; Patent No. 5786199
; GENERAL INFORMATION:
; APPLICANT: Palese, Peter
; TITLE OF INVENTION: RECOMBINANT NEGATIVE STRAND RNA VIRUS
; TITLE OF INVENTION: EXPRESSION SYSTEMS AND VACCINES
; NUMBER OF SEQUENCES: 70
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Pennie & Edmonds
; STREET: 1155 Avenue of the Americas
; CITY: New York
; STATE: New York
; COUNTRY: USA
; ZIP: 10036-2711
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
```

```
/ OPERATING SYSTEM: PC-DOS/MS-DOS
/ SOFTWARE: Patent In Release #1.0, Version #1.30
/ CURRENT APPLICATION DATA:
/ APPLICATION NUMBER: US/08/323,192D
/ FILING DATE: 14-OCT-1994
/ CLASSIFICATION: 435
/ ATTORNEY/AGENT INFORMATION:
/ NAME: Coruzzi, Laura A.
/ REGISTRATION NUMBER: 30,742
/ REFERENCE/DOCKET NUMBER: 7682-035
/ TELECOMMUNICATION INFORMATION:
/ TELEPHONE: (212) 790-9090
/ TELEFAX: (212) 869-9741/8864
/ TELEX: 66141 PENNIE
/ INFORMATION FOR SEQ ID NO: 11:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 15 base pairs
/ TYPE: nucleic acid
/ STRANDEDNESS: unknown
/ TOPOLOGY: unknown
/ MOLECULE TYPE: RNA
/ US-08-323-192D-11

Query Match          2.6%; Score 11.8; DB 1; Length 15;
Best Local Similarity 46.7%; Pred. No. 2.3e+02;
Matches 7; Conservative 6; Mismatches 2; Indels 0; Gaps 0;

QY 72 CCGCGTGGCTTTGCT 86
DB 1 CACCCGCUUUUCU 15

RESULT 243
US-08-294-424-35/c
/ Sequence 35, Application US/08294424
/ Patent No. 5800984
/ GENERAL INFORMATION:
/ APPLICANT: Vary, Calvin
/ TITLE OF INVENTION: NUCLEIC ACID SEQUENCE DETECTION BY
/ TITLE OF INVENTION: TRIPLE HELIX FORMATION
/ NUMBER OF SEQUENCES: 49
/ CORRESPONDENCE ADDRESS:
/ ADDRESSEE: Fish & Richardson
/ STREET: 225 Franklin Street
/ CITY: Boston
/ STATE: Massachusetts
/ COUNTRY: U.S.A.
/ ZIP: 02110-2804
/ COMPUTER READABLE FORM:
/ MEDIUM TYPE: 3.5" Diskette, 1.44 Mb storage
/ COMPUTER: IBM PS/2 Model 50Z or 55SX
/ OPERATING SYSTEM: IBM P.C. DOS (Version 3.30)
/ SOFTWARE: WordPerfect (Version 5.0)
/ CURRENT APPLICATION DATA:
/ APPLICATION NUMBER: US/08/294,424
/ FILING DATE:
/ CLASSIFICATION: 435
/ PRIOR APPLICATION DATA:
/ APPLICATION NUMBER: US/08/000,922
/ FILING DATE: 16 JAN 1993
/ APPLICATION NUMBER: US/07/629,601B
/ FILING DATE: 17-DEC-1990
/ ATTORNEY/AGENT INFORMATION:
/ NAME: Freeman, John W.
/ REGISTRATION NUMBER: 29,066
/ REFERENCE/DOCKET NUMBER: 00088-037001
/ TELECOMMUNICATION INFORMATION:
/ TELEPHONE: (617) 542-5070
/ TELEFAX: (617) 542-8906
/ TELEX: 200154
/ INFORMATION FOR SEQ ID NO: 35 :
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 15
```

```
/ TYPE: nucleic acid
/ STRANDEDNESS: single
/ TOPOLOGY: linear
/ US-08-294-424-35

Query Match          2.6%; Score 11.8; DB 1; Length 15;
Best Local Similarity 86.7%; Pred. No. 2.3e+02;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 373 GAGGAACGGAGCGAG 387
DB 15 GAGGAACGGAGGAG 1

RESULT 244
US-08-311-486C-218
/ Sequence 218, Application US/08311486C
/ Patent No. 5811300
/ GENERAL INFORMATION:
/ APPLICANT: Sean Sullivan
/ APPLICANT: Kenneth Draper
/ APPLICANT: Kevin Kisich
/ APPLICANT: Dan T. Stinchcomb
/ TITLE OF INVENTION: RIBOZYME TREATMENT OF
/ TITLE OF INVENTION: DISEASES OR CONDITIONS
/ TITLE OF INVENTION: RELATED TO LEVELS OF
/ TITLE OF INVENTION: TNF- $\alpha$ 
/ NUMBER OF SEQUENCES: 1157
/ CORRESPONDENCE ADDRESS:
/ ADDRESSEE: Lyon & Lyon
/ STREET: 633 West Fifth Street
/ STREET: Suite 4700
/ CITY: Los Angeles
/ STATE: California
/ COUNTRY: U.S.A.
/ ZIP: 90071-2066
/ COMPUTER READABLE FORM:
/ MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
/ MEDIUM TYPE: storage
/ COMPUTER: IBM Compatible
/ OPERATING SYSTEM: IBM P.C. DOS 5.0
/ SOFTWARE: Word Perfect 5.1
/ CURRENT APPLICATION DATA:
/ APPLICATION NUMBER: US/08/311,486C
/ FILING DATE: September 23, 1994
/ CLASSIFICATION: 435
/ PRIOR APPLICATION DATA:
/ PRIOR APPLICATION DATA: including application
/ PRIOR APPLICATION DATA: described below:
/ APPLICATION NUMBER: 08/008,895
/ FILING DATE: January 19, 1993
/ APPLICATION NUMBER: 07/989,849
/ FILING DATE: December 7, 1992
/ ATTORNEY/AGENT INFORMATION:
/ NAME: Warburg, Richard J.
/ REGISTRATION NUMBER: 32,327
/ REFERENCE/DOCKET NUMBER: 209/166
/ TELECOMMUNICATION INFORMATION:
/ TELEPHONE: (213) 489-1600
/ TELEFAX: (213) 955-0440
/ TELEX: 67-3510
/ INFORMATION FOR SEQ ID NO: 218:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 15 base pairs
/ TYPE: nucleic acid
/ STRANDEDNESS: single
/ TOPOLOGY: linear
/ US-08-311-486C-218

Query Match          2.6%; Score 11.8; DB 1; Length 15;
Best Local Similarity 66.7%; Pred. No. 2.3e+02;
Matches 10; Conservative 3; Mismatches 2; Indels 0; Gaps 0;
```



Qy 436 CTCGGCTCACATG 450  
 Db 1 CUUGGCUACAG 15

## RESULT 245

US-08-470-887A-10

; Sequence 10, Application US/08470887A  
 ; Patent No. 5820871  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Palese, Peter  
 ; APPLICANT: Garcia-Sastre, Adolfo  
 ; TITLE OF INVENTION: RECOMBINANT NEGATIVE STRAND RNA VIRUS  
 ; TITLE OF INVENTION: EXPRESSION SYSTEMS AND VACCINES  
 ; NUMBER OF SEQUENCES: 60  
 ; CORRESPONDENCE ADDRESS:  
 ; ADDRESSEE: Pennie & Edmonds  
 ; STREET: 1155 Avenue of the Americas  
 ; CITY: New York  
 ; STATE: New York  
 ; COUNTRY: USA  
 ; ZIP: 10036-2711  
 ; COMPUTER READABLE FORM:  
 ; MEDIUM TYPE: Floppy disk  
 ; COMPUTER: IBM PC compatible  
 ; OPERATING SYSTEM: PC-DOS/MS-DOS  
 ; SOFTWARE: PatentIn Release #1.0, Version #1.25  
 ; CURRENT APPLICATION DATA:  
 ; APPLICATION NUMBER: US/08/470,887A  
 ; FILING DATE: 06-JUN-1995  
 ; CLASSIFICATION:  
 ; ATTORNEY/AGENT INFORMATION:  
 ; NAME: Coruzzi, Laura A.  
 ; REGISTRATION NUMBER: 30,742  
 ; REFERENCE/DOCKET NUMBER: 7682-036  
 ; TELECOMMUNICATION INFORMATION:  
 ; TELEPHONE: (212) 790-9090  
 ; TELEFAX: (212) 869-9741/8864  
 ; TELEX: 66141 PENNIE  
 ; INFORMATION FOR SEQ ID NO: 10:  
 ; SEQUENCE CHARACTERISTICS:  
 ; LENGTH: 15 base pairs  
 ; TYPE: nucleic acid  
 ; STRANDEDNESS: single  
 ; TOPOLOGY: unknown  
 ; MOLECULE TYPE: RNA (genomic)  
 ; US-08-470-887A-10

Query Match 2.6%; Score 11.8; DB 1; Length 15;  
 Best Local Similarity 46.7%; Pred. No. 2.3e+02;  
 Matches 7; Conservative 6; Mismatches 2; Indels 0; Gaps 0;

Qy 72 CGCCGCTCTTTGCT 86  
 Db 1 CACCCUGCUUUGCU 15

## RESULT 246

US-08-292-620A-292/C

; Sequence 292, Application US/08292620A  
 ; Patent No. 5837542  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Susan Grimm  
 ; APPLICANT: Dan T. Stinchcomb  
 ; APPLICANT: James McSwiggen  
 ; APPLICANT: Sean Sullivan  
 ; APPLICANT: Kenneth G. Draper  
 ; TITLE OF INVENTION: RIBOZYME TREATMENT OF  
 ; TITLE OF INVENTION: DISEASES OR CONDITIONS  
 ; TITLE OF INVENTION: RELATED TO LEVELS OF  
 ; TITLE OF INVENTION: INTRACELLULAR ADHESION  
 ; TITLE OF INVENTION: MOLECULE-1 (I-CAM-1)

; NUMBER OF SEQUENCES: 2390  
 ; CORRESPONDENCE ADDRESS:  
 ; ADDRESSEE: Lyon & Lyon  
 ; STREET: 633 West Fifth Street  
 ; STREET: Suite 4700  
 ; CITY: Los Angeles  
 ; STATE: California  
 ; COUNTRY: U.S.A.  
 ; ZIP: 90071-2066  
 ; COMPUTER READABLE FORM:  
 ; MEDIUM TYPE: 3.5" Diskette, 1.44 Mb  
 ; MEDIUM TYPE: storage  
 ; COMPUTER: IBM Compatible  
 ; OPERATING SYSTEM: IBM P.C. DOS 5.0  
 ; SOFTWARE: Word Perfect 5.1  
 ; CURRENT APPLICATION DATA:  
 ; APPLICATION NUMBER: US/08/292,620A  
 ; FILING DATE: August 17, 1994  
 ; CLASSIFICATION: 435  
 ; PRIOR APPLICATION DATA:  
 ; PRIOR APPLICATION DATA: including application  
 ; PRIOR APPLICATION DATA: described below:  
 ; APPLICATION NUMBER: 08/008,895  
 ; FILING DATE: January 19, 1993  
 ; APPLICATION NUMBER: 07/989,849  
 ; FILING DATE: December 7, 1992  
 ; ATTORNEY/AGENT INFORMATION:  
 ; NAME: Warburg, Richard J.  
 ; REGISTRATION NUMBER: 32,327  
 ; REFERENCE/DOCKET NUMBER: 208/149  
 ; TELECOMMUNICATION INFORMATION:  
 ; TELEPHONE: (213) 489-1600  
 ; TELEFAX: (213) 955-0440  
 ; TELEX: 67-3510  
 ; INFORMATION FOR SEQ ID NO: 292:  
 ; SEQUENCE CHARACTERISTICS:  
 ; LENGTH: 15 base pairs  
 ; TYPE: nucleic acid  
 ; STRANDEDNESS: single  
 ; TOPOLOGY: linear  
 ; US-08-292-620A-292

Query Match 2.6%; Score 11.8; DB 1; Length 15;  
 Best Local Similarity 86.7%; Pred. No. 2.3e+02;  
 Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 21 GCGAGGGGTGGTGGC 35  
 Db 15 GCGTGGGAGGTGGC 1

## RESULT 247

US-08-316-439A-8

; Sequence 8, Application US/08316439A  
 ; Patent No. 5840520  
 ; GENERAL INFORMATION:  
 ; APPLICANT: CLARKE, DAVID KIRKWOOD  
 ; APPLICANT: PALESE, PETER M  
 ; TITLE OF INVENTION: RECOMBINANT NEGATIVE STRAND RNA VIRUS EXPRESSION  
 ; TITLE OF INVENTION: SYSTEMS  
 ; NUMBER OF SEQUENCES: 43  
 ; CORRESPONDENCE ADDRESS:  
 ; ADDRESSEE: COOLEY GODWARD CASTRO HUDDLESON & TATUM  
 ; STREET: FIVE PALO ALTO SQUARE  
 ; CITY: PALO ALTO  
 ; STATE: CALIFORNIA  
 ; COUNTRY: USA  
 ; ZIP: 94306  
 ; COMPUTER READABLE FORM:  
 ; MEDIUM TYPE: Floppy disk  
 ; COMPUTER: IBM PC compatible  
 ; OPERATING SYSTEM: PC-DOS/MS-DOS  
 ; SOFTWARE: PatentIn Release #1.0, Version #1.25

;;  
;; CURRENT APPLICATION DATA:  
;; APPLICATION NUMBER: US/08/316,439A  
;; FILING DATE: September 30, 1994  
;; CLASSIFICATION: 424  
;; PRIOR APPLICATION DATA:  
;; APPLICATION NUMBER: 08/190,678  
;; FILING DATE: February 1, 1994  
;; CLASSIFICATION: 424  
;; PRIOR APPLICATION DATA:  
;; APPLICATION NUMBER: 07/925,061  
;; FILING DATE: August 4, 1992  
;; CLASSIFICATION: 424  
;; PRIOR APPLICATION DATA:  
;; APPLICATION NUMBER: 07/527,237  
;; FILING DATE: May 22, 1990  
;; CLASSIFICATION: 424  
;; PRIOR APPLICATION DATA:  
;; APPLICATION NUMBER: 07/440,053  
;; FILING DATE: No. 5840520ember 21, 1989  
;; CLASSIFICATION: 424  
;; PRIOR APPLICATION DATA:  
;; APPLICATION NUMBER: 07/399,728  
;; FILING DATE: August 28, 1989  
;; CLASSIFICATION: 424  
;; ATTORNEY/AGENT INFORMATION:  
;; NAME: CSERR, LUANN  
;; REGISTRATION NUMBER: 31,822  
;; REFERENCE/DOCKET NUMBER: AVIR-010/000S  
;; TELECOMMUNICATION INFORMATION:  
;; TELEPHONE: (415) 843-5165  
;; TELEFAX: (415) 857-0663  
;; TELEX: 380816 COOLEY PA  
;; INFORMATION FOR SEQ ID NO: 8:  
;; SEQUENCE CHARACTERISTICS:  
;; LENGTH: 15 bases  
;; TYPE: nucleic acid  
;; STRANDEDNESS: single  
;; TOPOLOGY: linear  
;; MOLECULE TYPE: SYNTHETIC DNA  
US-08-316-439A-8

Query Match 2.6%; Score 11.8; DB 1; Length 15;  
Best Local Similarity 46.7%; Pred. No. 2.3e+02;  
Matches 7; Conservative 6; Mismatches 2; Indels 0; Gaps 0;

QY 72 CGCCGTCGTTTGCT 86  
|||:||||:|  
Db 1 CACCCUGCUUUGCU 15

RESULT 248  
US-08-252-508B-10  
; Sequence 10, Application US/08252508B  
; Patent No. 5854037  
; GENERAL INFORMATION:  
; APPLICANT: Palese, Peter  
; APPLICANT: Garcia-Sastre, Adolfo  
; TITLE OF INVENTION: RECOMBINANT NEGATIVE STRAND RNA VIRUS  
; TITLE OF INVENTION: EXPRESSION SYSTEMS AND VACCINES  
; NUMBER OF SEQUENCES: 60  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Pennie & Edmonds  
; STREET: 1155 Avenue of the Americas  
; CITY: New York  
; STATE: New York  
; COUNTRY: USA  
; ZIP: 10036-2711  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patent In Release #1.0, Version #1.25  
; CURRENT APPLICATION DATA:

;;  
;; APPLICATION NUMBER: US/08/252,508B  
;; FILING DATE: 01-JUN-1994  
;; CLASSIFICATION:  
;; ATTORNEY/AGENT INFORMATION:  
;; NAME: Coruzzi, Laura A.  
;; REGISTRATION NUMBER: 30,742  
;; REFERENCE/DOCKET NUMBER: 7682-034  
;; TELECOMMUNICATION INFORMATION:  
;; TELEPHONE: (212) 790-9090  
;; TELEFAX: (212) 869-9741/8864  
;; TELEX: 66141 PENNIE  
;; INFORMATION FOR SEQ ID NO: 10:  
;; SEQUENCE CHARACTERISTICS:  
;; LENGTH: 15 base pairs  
;; TYPE: nucleic acid  
;; STRANDEDNESS: single  
;; TOPOLOGY: unknown  
;; MOLECULE TYPE: RNA (genomic)  
US-08-252-508B-10

Query Match 2.6%; Score 11.8; DB 1; Length 15;  
Best Local Similarity 46.7%; Pred. No. 2.3e+02;  
Matches 7; Conservative 6; Mismatches 2; Indels 0; Gaps 0;

QY 72 CGCCGTCGTTTGCT 86  
|||:||||:|  
Db 1 CACCCUGCUUUGCU 15

RESULT 249  
US-08-173-489C-141/c  
; Sequence 141, Application US/08173489C  
; Patent No. 5861244  
; GENERAL INFORMATION:  
; APPLICANT: WANG, C. -G.  
; APPLICANT: HEPBURN, A. G.  
; TITLE OF INVENTION: GENETIC SEQUENCE ASSAY USING DNA  
; TITLE OF INVENTION: TRIPLE-STRAND FORMATION.  
; NUMBER OF SEQUENCES: 365  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: PROFILE DIAGNOSTIC SCIENCES, INC.,  
; STREET: 510 EAST 73RD STREET,  
; CITY: NEW YORK  
; STATE: NEW YORK  
; COUNTRY: USA  
; ZIP: 10021.  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: 3.5 inch, 1.44Mb storage  
; COMPUTER: IBM PC/XT/AT  
; OPERATING SYSTEM: MS-DOS version 6.2  
; SOFTWARE: Wordperfect Version 5.1  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/173,489C  
; FILING DATE: 22 DEC 1993  
; CLASSIFICATION: 435  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 07/968,436  
; FILING DATE: 29 OCT 1992  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Handelman, Joseph H.  
; REGISTRATION NUMBER: 26,179  
; REFERENCE/DOCKET NUMBER: U9518-6  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (attorney) (212) 708-1880  
; TELEFAX: (attorney) (212) 246-8959  
; INFORMATION FOR SEQ ID NO: 141:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 15 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: double stranded  
; TOPOLOGY: linear  
; MOLECULE TYPE: genomic DNA  
; DESCRIPTION: hepatitis B virus adr isolate,

; DESCRIPTION: nucleotides 2405 to 2419  
; HYPOTHETICAL: no  
; ANTI-SENSE: no  
; ORIGINAL SOURCE:  
; ORGANISM: Hepatitis B virus  
; INDIVIDUAL ISOLATE: adr  
; PUBLICATION INFORMATION:  
; AUTHORS: Fujiyama, A, Miyanchara, A, No. 5861244aki, C,  
; Yoneyama, T, Ohromo, N, Matsubara, K.  
; TITLE: Cloning and structural  
; TITLE: analysis of Hepatitis B virus DNAs subtype adr  
; JOURNAL: Nucleic Acids Research  
; VOLUME: 11  
; PAGES: 4601-4610  
; DATE: 1983  
; RELEVANT RESIDUES IN SEQ ID NO: 141 :FROM 1 TO 15  
US-08-173-489C-141

Query Match 2.6%; Score 11.8; DB 1; Length 15;  
Best Local Similarity 86.7%; Pred. No. 2.3e+02;  
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 373 GAGGAACGCGCGAG 387  
Db 15 GAGGAAGGCGGAG 1

RESULT 250  
US-08-550-120-3  
; Sequence 3, Application US/08550120  
; Patent No. 5985554  
; GENERAL INFORMATION:  
; APPLICANT: Hiroshi TANIMURA et al.  
; TITLE OF INVENTION: METHOD FOR PROBING THE FUNCTION OF A PROTEIN  
; NUMBER OF SEQUENCES: 14  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Wenderoth, Lind & Ponack  
; STREET: 805 Fifteenth Street, N.W., #700  
; CITY: Washington  
; STATE: D.C.  
; COUNTRY: U.S.A.  
; ZIP: 20005  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Dikette, 3.5 inch, 1.44 mb  
; COMPUTER: IBM Compatible  
; OPERATING SYSTEM: MS-DOS  
; SOFTWARE: Wordperfect 5.1  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/550,120  
; FILING DATE: October 30, 1995  
; CLASSIFICATION: 435  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: JP 6-269417  
; FILING DATE: No. 598554ember 2, 1994  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Warren M. Cheek, Jr.  
; REGISTRATION NUMBER: 33,367  
; REFERENCE/DOCKET NUMBER:  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: 202-371-8850  
; TELEFAX:  
; TELEX:  
; INFORMATION FOR SEQ ID NO: 3:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 15 bases  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: other nucleic acid, synthetic DNA  
US-08-550-120-3

Query Match 2.6%; Score 11.8; DB 1; Length 15;  
Best Local Similarity 86.7%; Pred. No. 2.3e+02;

Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 389 CCGCGCGCGCGCGC 403  
Db 1 CCGCGCGCGCGCGC 15

RESULT 251  
US-09-106-377-10  
; Sequence 10, Application US/09106377  
; Patent No. 6001634  
; GENERAL INFORMATION:  
; APPLICANT: Palese, Peter  
; APPLICANT: Garcia-Sastre, Adolfo  
; TITLE OF INVENTION: RECOMBINANT NEGATIVE STRAND RNA VIRUS  
; TITLE OF INVENTION: EXPRESSION SYSTEMS AND VACCINES  
; NUMBER OF SEQUENCES: 60  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Pennie & Edmonds  
; STREET: 1155 Avenue of the Americas  
; CITY: New York  
; STATE: New York  
; COUNTRY: USA  
; ZIP: 10036-2711  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.25  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/09/106,377  
; FILING DATE:  
; CLASSIFICATION:  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/252,508  
; FILING DATE: 01-JUN-1994  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Coruzzi, Laura A.  
; REGISTRATION NUMBER: 30,742  
; REFERENCE/DOCKET NUMBER: 7682-034  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (212) 790-9090  
; TELEFAX: (212) 869-9741/8864  
; TELEX: 66141 PENNIE  
; INFORMATION FOR SEQ ID NO: 10:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 15 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: unknown  
; MOLECULE TYPE: RNA (genomic)  
US-09-106-377-10

Query Match 2.6%; Score 11.8; DB 1; Length 15;  
Best Local Similarity 46.7%; Pred. No. 2.3e+02;  
Matches 7; Conservative 6; Mismatches 2; Indels 0; Gaps 0;

Qy 72 CGCGCGCTTTTGT 86  
Db 1 CACCCUGCUUUGCU 15

RESULT 252  
US-09-071-845-292/c  
; Sequence 292, Application US/09071845  
; Patent No. 6132967  
; GENERAL INFORMATION:  
; APPLICANT: Susan Grimm  
; APPLICANT: Dan T. Stinchcomb  
; APPLICANT: James McSwiggen  
; APPLICANT: Sean Sullivan  
; APPLICANT: Kenneth G. Draper  
; TITLE OF INVENTION: RIBOZYME TREATMENT OF

```

; TITLE OF INVENTION: DISEASES OR CONDITIONS
; TITLE OF INVENTION: RELATED TO LEVELS OF
; TITLE OF INVENTION: INTRACELLULAR ADHESION
; TITLE OF INVENTION: MOLECULE-1 (I-CAM-1)
; NUMBER OF SEQUENCES: 2390
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Lyon & Lyon
; STREET: 633 West Fifth Street
; CITY: Suite 4700
; CITY: Los Angeles
; STATE: California
; COUNTRY: U.S.A.
; ZIP: 90071-2066
;
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
; MEDIUM TYPE: storage
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: IBM P.C. DOS 5.0
; SOFTWARE: Word Perfect 5.1
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/071.845
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/08/292.620
; FILING DATE: August 17, 1994
; APPLICATION NUMBER: 08/008,895
; FILING DATE: January 19, 1993
; APPLICATION NUMBER: 07/989,849
; FILING DATE: December 7, 1992
; ATTORNEY/AGENT INFORMATION:
; NAME: Warburg, Richard J.
; REGISTRATION NUMBER: 32,327
; REFERENCE/DOCKET NUMBER: 208/149
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (213) 489-1600
; TELEFAX: (213) 955-0440
; TELEX: 67-3510
;
; INFORMATION FOR SEQ ID NO: 292:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 15 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
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; US-09-071-845-292
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; Query Match 2.6%; Score 11.8; DB 1; Length 15;
; Best Local Similarity 86.7%; Pred. No. 2.3e+02;
; Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
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; Qy 21 GCGAGGGGTGGTGGC 35
; Db 15 GCGTGGGGAGGTGCC 1
;
; RESULT 253
; US-08-871-732A-9
; Sequence 9, Application US/08871732A
; Patent No. 6140074
; GENERAL INFORMATION:
; APPLICANT: O'BRIEN, TIMOTHY J.
; APPLICANT: WANG, YIN
; TITLE OF INVENTION: NOVEL SH3 PROTEIN, GENE, CHIMERIC
; TITLE OF INVENTION: CELLS, VECTORS AND EXPRESSION METHOD FOR PRODUCING THE NOVEL
; TITLE OF INVENTION: PROTEIN, ANTIBODIES AND USES
; NUMBER OF SEQUENCES: 16
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: MARTIN L. MCGREGOR
; STREET: 5380 WEST 34TH STREET, #345
; CITY: HOUSTON
; STATE: TEXAS
; COUNTRY: UNITED STATES OF AMERICA
; ZIP: 77092

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; COMPUTER READABLE FORM:
; MEDIUM TYPE: DISKETTE 3.5 INCH 1.44 MB STORAGE
; COMPUTER: IBM COMPATIBLE
; OPERATING SYSTEM: MS-DOS
; SOFTWARE: WORDPERFECT 6.1
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/871,732A
; FILING DATE:
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; ATTORNEY/AGENT INFORMATION:
; NAME: MCGREGOR, MARTIN L.
; REGISTRATION NUMBER: 29,329
; REFERENCE/DOCKET NUMBER: 1-1
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 713-682-1213
; TELEFAX: 713-682-5807
; TELEX: NONE
; INFORMATION FOR SEQ ID NO: 9:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 15 BASE PAIRS
; TYPE: NUCLEIC ACID
; STRANDEDNESS: SINGLE
; TOPOLOGY: LINEAR
; MOLECULE TYPE: OTHER NUCLEIC ACID
; HYPOTHETICAL: NO
; ANTI-SENSE: NO
;
; US-08-871-732A-9
;
; Query Match 2.6%; Score 11.8; DB 1; Length 15;
; Best Local Similarity 86.7%; Pred. No. 2.3e+02;
; Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
;
; Qy 21 GCGAGGGGTGGTGGC 35
; Db 1 GCGTGGGGGTGGC 15
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; RESULT 254
; US-09-180-437-212/c
; Sequence 212, Application US/09180437
; Patent No. 6251873
; GENERAL INFORMATION:
; APPLICANT: FUKUSAKO, Shioji
; APPLICANT: MORISAWA, Yoshifumi
; APPLICANT: KUSUVAMA, Takeshi
; TITLE OF INVENTION: Antisense Compounds to CD14
; FILE REFERENCE: 1110-209P
; CURRENT APPLICATION NUMBER: US/09/180,437
; CURRENT FILING DATE: 1998-11-06
; EARLIER APPLICATION NUMBER: PCT/JP98/00953
; EARLIER FILING DATE: 1998-03-09
; EARLIER APPLICATION NUMBER: 09-053518 JAPAN
; EARLIER FILING DATE: 1997-03-07
; NUMBER OF SEQ ID NOS: 289
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 212
; LENGTH: 15
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: other nucleic
; OTHER INFORMATION: acid
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; US-09-180-437-212
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; Query Match 2.6%; Score 11.8; DB 1; Length 15;
; Best Local Similarity 86.7%; Pred. No. 2.3e+02;
; Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
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; Qy 264 GCCCGGGGCTTCTCC 278
; Db 15 GCCCGGGGCTTGGC 1

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RESULT 255
US-09-346-510B-9
; Sequence 9, Application US/09346510B
; Patent No. 6281014
; GENERAL INFORMATION:
; APPLICANT: O'Brien, Timothy J.
; APPLICANT: Wang, Yinxiang
; TITLE OF INVENTION: SH3-Containing Protein, DNA and Uses Thereof
; FILE REFERENCE: D6221CIP
; CURRENT APPLICATION NUMBER: US/09/346.510B
; CURRENT FILING DATE: 1999-07-01
; PRIOR APPLICATION NUMBER: 08/871,732
; PRIOR FILING DATE: 1997-06-09
; NUMBER OF SEQ ID NOS: 32
; SEQ ID NO 9
; LENGTH: 15
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: nucleotide sequence of clone 17 isolated using the
; OTHER INFORMATION: CASTING approach
US-09-346-510B-9

Query Match      2.6%; Score 11.8; DB 1; Length 15;
Best Local Similarity 86.7%; Pred. No. 2.3e+02;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy      21 GGGAGGGGTGGTGGC 35
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Db      1 GGGTGGGGGGGTGGC 15

RESULT 256
US-09-544-934B-106
; Sequence 106, Application US/09544934B
; Patent No. 6753421
; GENERAL INFORMATION:
; APPLICANT: Henrik Stender
; APPLICANT: Kaare Lund
; APPLICANT: Tina Anderson Hollerup
; TITLE OF INVENTION: No. 6753421el Process For The Detection of Mycobacteria
; NUMBER OF SEQUENCES: 123
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: FINNEGAN, HENDERSON, FARABOW, GARRETT, & DUNNER
; STREET: 1300 I ST. NW
; CITY: Washington
; STATE: District of Columbia
; COUNTRY: USA
; ZIP: 20005
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk 3.5 inch
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: ASCxi
; SOFTWARE: Microsoft Word
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/544,934B
; FILING DATE: 07-Apr-2000
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 60/028,392
; FILING DATE: 15-Oct-96
; APPLICATION NUMBER: 60/029,595
; FILING DATE: 23-Oct-96
; APPLICATION NUMBER: 60/045,962
; FILING DATE: 08-May-97
; APPLICATION NUMBER: 08/943,777
; FILING DATE: 3-Oct-97
; ATTORNEY/AGENT INFORMATION:
; NAME: Anthony C. Tridico
; REGISTRATION NUMBER: 45,958
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (202) 408-4173
; TELEFAX: (202) 408-4400
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; INFORMATION FOR SEQ ID NO: 106:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 15 basepairs
; TYPE: nucleic acid basepairs
; STRANDEDNESS: single
; TOPOLOGY: linear
; SEQUENCE DESCRIPTION: SEQ ID NO: 106:
US-09-544-934B-106

Query Match      2.6%; Score 11.8; DB 1; Length 15;
Best Local Similarity 86.7%; Pred. No. 2.3e+02;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy      180 CAGCTGCTGCCCGT 194
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Db      1 CGGCTGCTGGCAGT 15

RESULT 257
5166057-23
; Patent No. 5166057
; APPLICANT: PALISE, PETER; PARVIN, JEFFREY D.; KRYSSTAL, MARK
; TITLE OF INVENTION: RECOMBIANT NEGATIVE STRAND RNA VIRUS
; EXPRESSION-SYSTEMS
; NUMBER OF SEQUENCES: 43
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/07/527,237
; FILING DATE: 22-MAY-1990
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 440,053
; FILING DATE: 21-NOV-1989
; APPLICATION NUMBER: 399,728
; FILING DATE: 28-AUG-1989
; SEQ ID NO: 23
; LENGTH: 15
5166057-23

Query Match      2.6%; Score 11.8; DB 1; Length 15;
Best Local Similarity 46.7%; Pred. No. 2.3e+02;
Matches 7; Conservative 6; Mismatches 2; Indels 0; Gaps 0;

Qy      72 CGCGCGCTTTTGT 86
      | ||| : ||| : ||| :
Db      1 CACCCUGCUUUUGCU 15

Search completed: August 24, 2005, 14:29:01
Job time : 3 secs
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GenCore version 5.1.6  
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OM nucleic - nucleic search, using sw model

Run on: August 24, 2005, 14:36:10 ; Search time 2 Seconds  
(without alignments)

3.348 Million cell updates/sec

Title: US-09-436-060A-16

Perfect score: 451

Sequence: 1 99gttcgaggggtggcct.....aggactcggtcacacatgc 451

Scoring table: IDENTITY NUC

Gapop 10.0 , Gapext 0.5

Searched: 375 seqs, 7423 residues

Total number of hits satisfying chosen parameters: 750

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 376 summaries

Database : rnnpb.subdb.\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

# SUMMARIES

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2	31	6.9	31	1	US-10-330-872-1
3	31	6.9	31	1	US-10-811-033-1
4	30	6.7	30	1	US-09-057-351-22
5	30	6.7	30	1	US-09-030-461-2
6	30	6.7	30	1	US-10-359-935-22
7	30	6.7	30	1	US-10-330-872-4
8	30	6.7	30	1	US-10-330-872-5
9	30	6.7	30	1	US-10-811-033-4
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11	28.4	6.3	30	1	US-10-330-872-3
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15	26	5.8	26	1	US-09-895-606-25
16	26	5.8	26	1	US-09-895-606-26
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18	26	5.8	26	1	US-10-044-692-312
19	26	5.8	26	1	US-10-044-539-311
20	26	5.8	26	1	US-10-044-539-312
21	26	5.8	26	1	US-10-359-935-30
22	26	5.8	26	1	US-10-359-935-30
23	26	5.8	26	1	US-10-325-810-597
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25	26	5.8	26	1	US-10-877-124-597
26	26	5.8	26	1	US-10-877-124-598
27	26	5.8	26	1	US-10-877-022-597
28	26	5.8	26	1	US-10-877-022-598
29	26	5.8	26	1	US-10-877-146-598
30	26	5.8	26	1	US-10-877-146-598
31	25	5.5	28	1	US-09-057-351-29
32	25	5.5	28	1	US-10-359-935-29
33	24	5.3	24	1	US-09-018-125-4

24	5.3	24	34	1	US-09-018-125-5	Sequence 5, Appli
23	5.1	23	35	1	US-10-714-195-345	Sequence 145, App
23	5.1	23	36	1	US-10-923-330-510	Sequence 510, App
23	5.1	23	37	1	US-10-923-330-511	Sequence 511, App
23	5.1	23	38	1	US-10-923-330-512	Sequence 512, App
23	5.1	23	39	1	US-10-923-330-513	Sequence 513, App
23	5.1	23	40	1	US-10-923-330-515	Sequence 515, App
23	5.1	23	41	1	US-10-923-330-516	Sequence 516, App
23	5.1	23	42	1	US-10-923-330-517	Sequence 517, App
23	5.1	23	43	1	US-10-923-330-518	Sequence 518, App
23	5.1	23	44	1	US-10-923-330-519	Sequence 519, App
23	5.1	23	45	1	US-10-923-330-520	Sequence 520, App
23	5.1	23	46	1	US-10-923-330-521	Sequence 521, App
22	4.9	22	47	1	US-09-057-351-41	Sequence 41, Appl
22	4.9	22	48	1	US-09-057-351-42	Sequence 42, Appl
22	4.9	22	49	1	US-10-359-935-41	Sequence 41, Appl
22	4.9	22	50	1	US-10-359-935-42	Sequence 42, Appl
22	4.9	22	51	1	US-10-330-872-2	Sequence 2, Appli
22	4.9	22	52	1	US-10-831-266-12	Sequence 12, Appl
22	4.9	22	53	1	US-10-831-266-13	Sequence 13, Appl
22	4.9	22	54	1	US-10-831-267-12	Sequence 12, Appl
22	4.9	22	55	1	US-10-831-267-13	Sequence 13, Appl
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21	4.7	21	57	1	US-09-057-351-25	Sequence 25, Appl
21	4.7	21	58	1	US-10-359-935-25	Sequence 25, Appl
21	4.7	21	59	1	US-10-923-330-536	Sequence 536, App
21	4.7	21	60	1	US-10-923-330-537	Sequence 537, App
21	4.7	21	61	1	US-10-923-330-538	Sequence 538, App
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21	4.7	21	63	1	US-10-923-330-541	Sequence 541, App
21	4.7	21	64	1	US-10-923-330-542	Sequence 542, App
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21	4.7	21	66	1	US-10-923-330-544	Sequence 544, App
20	4.4	20	67	1	US-09-057-351-7	Sequence 7, Appli
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19	4.2	19	72	1	US-10-016-490-8	Sequence 8, Appli
19	4.2	19	73	1	US-10-831-267-16	Sequence 16, Appl
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19	4.2	19	75	1	US-10-831-267-18	Sequence 18, Appl
19	4.2	19	76	1	US-10-831-267-19	Sequence 19, Appl
19	4.2	19	77	1	US-10-714-195-343	Sequence 343, App
19	4.2	19	78	1	US-10-714-195-344	Sequence 344, App
19	4.2	19	79	1	US-10-923-330-7	Sequence 7, Appli
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19	4.2	19	81	1	US-10-923-330-9	Sequence 9, Appli
19	4.2	19	82	1	US-10-923-330-10	Sequence 10, Appl
19	4.2	19	83	1	US-10-923-330-11	Sequence 11, Appl
19	4.2	19	84	1	US-10-923-330-12	Sequence 12, Appl
19	4.2	19	85	1	US-10-923-330-13	Sequence 13, Appl
19	4.2	19	86	1	US-10-923-330-14	Sequence 14, Appl
19	4.2	19	87	1	US-10-923-330-15	Sequence 15, Appl
19	4.2	19	88	1	US-10-923-330-16	Sequence 16, Appl
19	4.2	19	89	1	US-10-923-330-17	Sequence 17, Appl
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19	4.2	19	93	1	US-10-923-330-21	Sequence 21, Appl
19	4.2	19	94	1	US-10-923-330-22	Sequence 22, Appl
19	4.2	19	95	1	US-10-923-330-23	Sequence 23, Appl
19	4.2	19	96	1	US-10-923-330-24	Sequence 24, Appl
19	4.2	19	97	1	US-10-923-330-25	Sequence 25, Appl
19	4.2	19	98	1	US-10-923-330-26	Sequence 26, Appl
19	4.2	19	99	1	US-10-923-330-27	Sequence 27, Appl
19	4.2	19	100	1	US-10-923-330-28	Sequence 28, Appl
19	4.2	19	101	1	US-10-923-330-29	Sequence 29, Appl
19	4.2	19	102	1	US-10-923-330-30	Sequence 30, Appl
19	4.2	19	103	1	US-10-923-330-31	Sequence 31, Appl
19	4.2	19	104	1	US-10-923-330-32	Sequence 32, Appl
19	4.2	19	105	1	US-10-923-330-33	Sequence 33, Appl
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253	13.8	3.1	17	1	US-09-827-395A-630	Sequence 630, App	c 326	12.8	2.8	17	1	US-09-776-474-7	Sequence 7, Appli
254	13.8	3.1	17	1	US-09-740-332-800	Sequence 800, App	c 327	12.8	2.8	17	1	US-09-930-423-333	Sequence 333, App
255	13.8	3.1	17	1	US-09-740-332-3130	Sequence 334, App	c 328	12.8	2.8	17	1	US-09-930-423-334	Sequence 334, App
256	13.8	3.1	17	1	US-09-792-818-129	Sequence 129, App	c 329	12.8	2.8	17	1	US-09-930-423-335	Sequence 335, App
257	13.8	3.1	17	1	US-09-792-818-330	Sequence 330, App	c 330	12.8	2.8	17	1	US-09-930-423-1159	Sequence 1159, App
258	13.8	3.1	17	1	US-09-745-237A-5	Sequence 5, Appli	c 331	12.8	2.8	17	1	US-09-930-423-1470	Sequence 1470, App
259	13.8	3.1	17	1	US-09-745-237A-336	Sequence 336, App	c 332	12.8	2.8	17	1	US-09-827-395A-899	Sequence 899, App
260	13.8	3.1	17	1	US-09-745-237A-1471	Sequence 1471, App	c 333	12.8	2.8	17	1	US-09-740-332-1425	Sequence 1425, App
261	13.8	3.1	17	1	US-09-745-237A-1472	Sequence 1472, App	c 334	12.8	2.8	17	1	US-09-740-332-3639	Sequence 3639, App
262	13.8	3.1	17	1	US-09-817-879-800	Sequence 800, App	c 335	12.8	2.8	17	1	US-09-740-332-3755	Sequence 3755, App
263	13.8	3.1	17	1	US-09-817-879-3130	Sequence 3130, App	c 336	12.8	2.8	17	1	US-09-792-818-331	Sequence 331, App
264	13.8	3.1	17	1	US-10-156-306-5871	Sequence 5871, App	c 337	12.8	2.8	17	1	US-09-745-237A-333	Sequence 333, App
265	13.8	3.1	17	1	US-10-156-306-5872	Sequence 5872, App	c 338	12.8	2.8	17	1	US-09-745-237A-334	Sequence 334, App
266	13.8	3.1	17	1	US-10-230-006-2217	Sequence 2217, App	c 339	12.8	2.8	17	1	US-09-745-237A-335	Sequence 335, App
267	13.8	3.1	17	1	US-10-430-882-630	Sequence 630, App	c 340	12.8	2.8	17	1	US-09-745-237A-1159	Sequence 1159, App
268	13.8	3.1	17	1	US-10-712-672-2726	Sequence 2726, App	c 341	12.8	2.8	17	1	US-09-745-237A-1470	Sequence 1470, App
269	13.8	3.1	17	1	US-10-669-841-3393	Sequence 3393, App	c 342	12.8	2.8	17	1	US-09-817-879-1425	Sequence 1425, App
270	13.8	3.1	17	1	US-10-669-841-5723	Sequence 5723, App	c 343	12.8	2.8	17	1	US-09-817-879-3639	Sequence 3639, App
271	13.8	3.1	18	1	US-09-961-077-571	Sequence 571, App	c 344	12.8	2.8	17	1	US-09-817-879-3755	Sequence 3755, App
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273	13.4	3.0	17	1	US-09-864-785-1488	Sequence 1488, App	c 346	12.8	2.8	17	1	US-10-060-895A-739	Sequence 739, App
274	13.4	3.0	17	1	US-09-740-332-917	Sequence 917, App	c 347	12.8	2.8	17	1	US-10-163-552-20	Sequence 20, Appl
275	13.4	3.0	17	1	US-09-740-332-3638	Sequence 3638, App	c 348	12.8	2.8	17	1	US-10-163-552-869	Sequence 869, App
276	13.4	3.0	17	1	US-09-792-818-429	Sequence 429, App	c 349	12.8	2.8	17	1	US-10-156-306-4930	Sequence 4930, App
277	13.4	3.0	17	1	US-09-792-818-857	Sequence 857, App	c 350	12.8	2.8	17	1	US-10-156-306-6942	Sequence 6942, App
278	13.4	3.0	17	1	US-09-817-879-317	Sequence 317, App	c 351	12.8	2.8	17	1	US-10-238-700-2700	Sequence 2700, App
279	13.4	3.0	17	1	US-09-817-879-3638	Sequence 3638, App	c 352	12.8	2.8	17	1	US-10-238-700-2821	Sequence 2821, App
280	13.4	3.0	17	1	US-10-232-634-11	Sequence 11, Appl	c 353	12.8	2.8	17	1	US-10-238-700-3508	Sequence 3508, App
281	13.4	3.0	17	1	US-10-232-634-12	Sequence 12, Appl	c 354	12.8	2.8	17	1	US-10-061-201-715	Sequence 715, App
282	13.4	3.0	17	1	US-10-157-580A-27	Sequence 27, Appl	c 355	12.8	2.8	17	1	US-10-061-201-716	Sequence 716, App
283	13.4	3.0	17	1	US-10-157-580A-38	Sequence 38, Appl	c 356	12.8	2.8	17	1	US-10-230-006-1249	Sequence 1249, App
284	13.4	3.0	17	1	US-10-157-580A-68	Sequence 68, Appl	c 357	12.8	2.8	17	1	US-10-230-006-1284	Sequence 1284, App
285	13.4	3.0	17	1	US-10-138-674-4559	Sequence 4559, App	c 358	12.8	2.8	17	1	US-10-430-882-899	Sequence 899, App
286	13.4	3.0	17	1	US-10-138-674-7501	Sequence 7501, App	c 359	12.8	2.8	17	1	US-10-297-068-1071	Sequence 1071, App
287	13.4	3.0	17	1	US-10-287-949A-4559	Sequence 4559, App	c 360	12.8	2.8	17	1	US-10-307-005-751	Sequence 751, App
288	13.4	3.0	17	1	US-10-287-949A-7501	Sequence 7501, App	c 361	12.8	2.8	17	1	US-10-307-005-752	Sequence 752, App
289	13.4	3.0	17	1	US-10-669-841-3510	Sequence 3510, App	c 362	12.8	2.8	17	1	US-10-342-902-1053	Sequence 1053, App
290	13.4	3.0	17	1	US-10-669-841-6231	Sequence 6231, App	c 363	12.8	2.8	17	1	US-10-138-674-8374	Sequence 8374, App
291	13.4	3.0	17	1	US-10-712-633-490	Sequence 490, App	c 364	12.8	2.8	17	1	US-10-287-949A-8374	Sequence 8374, App
292	13.4	3.0	17	1	US-10-949-004-11	Sequence 11, Appl	c 365	12.8	2.8	17	1	US-10-712-672-757	Sequence 757, App
293	13.4	3.0	17	1	US-10-949-004-12	Sequence 12, Appl	c 366	12.8	2.8	17	1	US-10-712-672-1149	Sequence 1149, App
294	13.4	3.0	17	1	US-10-724-270-6668	Sequence 6668, App	c 367	12.8	2.8	17	1	US-10-669-841-1053	Sequence 1053, App
295	13.4	3.0	17	1	US-10-724-270-6679	Sequence 6679, App	c 368	12.8	2.8	17	1	US-10-669-841-4018	Sequence 4018, App
296	13.4	3.0	17	1	US-10-724-270-6709	Sequence 6709, App	c 369	12.8	2.8	17	1	US-10-669-841-6232	Sequence 6232, App
297	13.4	3.0	17	1	US-10-911-318-41	Sequence 41, Appl	c 370	12.8	2.8	17	1	US-10-669-841-6348	Sequence 6348, App
298	13	2.9	13	1	US-09-893-252-4	Sequence 4, Appl	c 371	12.8	2.8	17	1	US-10-712-633-3415	Sequence 3415, App
299	13	2.9	13	1	US-10-038-335-1	Sequence 1, Appli	c 372	12.8	2.8	17	1	US-10-724-270-1379	Sequence 1379, App
300	13	2.9	13	1	US-10-038-335-2	Sequence 2, Appli	c 373	12.8	2.8	17	1	US-10-724-270-1500	Sequence 1500, App
301	13	2.9	13	1	US-10-255-535-3	Sequence 3, Appli	c 374	12.8	2.8	17	1	US-10-724-270-2187	Sequence 2187, App
302	13	2.9	13	1	US-10-463-076-2	Sequence 2, Appli	c 375	12.8	2.8	17	1	US-10-724-270-4675	Sequence 4675, App
303	13	2.9	13	1	US-10-463-076-8	Sequence 8, Appli	c 376	12.8	2.8	17	1	US-10-724-270-5524	Sequence 5524, App
304	13	2.9	13	1	US-10-181-823-18	Sequence 18, Appl							
305	13	2.9	13	1	US-10-181-823-22	Sequence 22, Appl							
306	13	2.9	13	1	US-10-967-755-2	Sequence 2, Appli							
307	13	2.9	13	1	US-10-967-755-8	Sequence 8, Appli							
308	13	2.9	16	1	US-10-618-779-34	Sequence 34, Appl							
309	13	2.9	17	1	US-10-238-700-3509	Sequence 3509, App							
310	13	2.9	17	1	US-10-724-270-2188	Sequence 2188, App							
311	12.8	2.8	16	1	US-09-887-505-159	Sequence 159, App							
312	12.8	2.8	16	1	US-10-712-672-1787	Sequence 1787, App							
313	12.8	2.8	16	1	US-10-463-958-61	Sequence 61, Appl							
314	12.8	2.8	16	1	US-10-730-771-444	Sequence 444, App							
315	12.8	2.8	17	1	US-09-961-077-828	Sequence 828, App							
316	12.8	2.8	17	1	US-09-780-533A-27	Sequence 27, Appl							
317	12.8	2.8	17	1	US-09-780-533A-58	Sequence 58, Appl							
318	12.8	2.8	17	1	US-09-780-533A-59	Sequence 59, Appl							
319	12.8	2.8	17	1	US-09-780-533A-1810	Sequence 1810, App							
320	12.8	2.8	17	1	US-09-877-478-1053	Sequence 1053, App							
321	12.8	2.8	17	1	US-09-848-754A-1036	Sequence 1036, App							
322	12.8	2.8	17	1	US-09-848-754A-1037	Sequence 1037, App							
323	12.8	2.8	17	1	US-09-848-754A-1038	Sequence 1038, App							
324	12.8	2.8	17	1	US-09-848-754A-1039	Sequence 1039, App							
325	12.8	2.8	17	1	US-09-848-754A-1653	Sequence 1653, App							

## ALIGNMENTS

## RESULT 1

US-10-714-195-84  
; Sequence 84, Application US/10714195  
; Publication No. US20050019785A1  
; GENERAL INFORMATION:  
; APPLICANT: Baker, Joffre  
; APPLICANT: Cronin, Maureen  
; APPLICANT: Shak, Steve  
; APPLICANT: Baselga, Jose  
; TITLE OF INVENTION: GENE EXPRESSION PROFILING OF EGFR  
; TITLE OF INVENTION: POSITIVE CANCER  
; FILE REFERENCE: 39740-0005  
; CURRENT APPLICATION NUMBER: US/10/714,195  
; CURRENT FILING DATE: 2003-11-14  
; PRIOR APPLICATION NUMBER: 60/427090  
; PRIOR FILING DATE: 2003-11-15  
; NUMBER OF SEQ ID NOS: 372

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; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 84
; LENGTH: 79
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-714-195-84

Query Match          17.5%; Score 79; DB 1; Length 79;
Best Local Similarity 100.0%; Pred. No. 0.00058;
Matches 79; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 371 AAGAGGAACGGAGCGAGTCCCGCGCGCGCGCGAGATTCCTGAGCTGTGGACGTGCACC 430
Db 1 AAGAGGAACGGAGCGAGTCCCGCGCGCGCGCGAGATTCCTGAGCTGTGGACGTGCACC 60

QY 431 CAGGACTCGGCTCACACAT 449
Db 61 CAGGACTCGGCTCACACAT 79

RESULT 2
US-10-330-872-1/c
; Sequence 1, Application US/10330872
; Publication No. US20030186282A1
; GENERAL INFORMATION:
; APPLICANT: Geron Corporation
; APPLICANT: Weinrich, Scott
; APPLICANT: Atkinson III, Edward
; APPLICANT: Lichtsteiner, Serge
; APPLICANT: Vasserot, Alain
; APPLICANT: Pruzan, Ronald
; TITLE OF INVENTION: Using Purified Telomerase to Identify Telomerase Activators and
; FILE REFERENCE: 011/006C
; CURRENT APPLICATION NUMBER: US/10/330,872
; PRIOR FILING DATE: 2002-12-24
; PRIOR APPLICATION NUMBER: 08/510,736
; PRIOR FILING DATE: 1995-08-04
; PRIOR FILING DATE: 1997-04-04
; PRIOR APPLICATION NUMBER: 09/420,056
; PRIOR FILING DATE: 1999-10-18
; PRIOR APPLICATION NUMBER: 09/717,828
; PRIOR FILING DATE: 2000-11-20
; NUMBER OF SEQ ID NOS: 11
; SOFTWARE: Patent in version 3.1
; SEQ ID NO 1
; LENGTH: 31
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-330-872-1

Query Match          6.9%; Score 31; DB 1; Length 31;
Best Local Similarity 100.0%; Pred. No. 13;
Matches 31; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 42 TTGTCTAACCTTAAGTGAAGGGCGTAGGC 72
Db 31 TTGTCTAACCTTAAGTGAAGGGCGTAGGC 1

RESULT 3
US-10-330-872-1/c
; Sequence 1, Application US/10811033
; Publication No. US2005008983A1
; GENERAL INFORMATION:
; APPLICANT: Geron Corporation
; APPLICANT: Weinrich, Scott
; APPLICANT: Atkinson III, Edward
; APPLICANT: Lichtsteiner, Serge
; APPLICANT: Vasserot, Alain
; APPLICANT: Pruzan, Ronald
; TITLE OF INVENTION: Using Purified Telomerase to Identify Telomerase Activators and
; FILE REFERENCE: 011/006C
; CURRENT APPLICATION NUMBER: US/10/330,872
; PRIOR FILING DATE: 2002-12-24
; PRIOR APPLICATION NUMBER: 08/510,736
; PRIOR FILING DATE: 1995-08-04
; PRIOR FILING DATE: 1997-04-04
; PRIOR APPLICATION NUMBER: 09/420,056
; PRIOR FILING DATE: 1999-10-18
; PRIOR APPLICATION NUMBER: 09/717,828
; PRIOR FILING DATE: 2000-11-20
; NUMBER OF SEQ ID NOS: 11
; SOFTWARE: Patent in version 3.1
; SEQ ID NO 1
; LENGTH: 31
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-330-872-1

Query Match          6.9%; Score 31; DB 1; Length 31;
Best Local Similarity 100.0%; Pred. No. 13;
Matches 31; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 42 TTGTCTAACCTTAAGTGAAGGGCGTAGGC 72
Db 31 TTGTCTAACCTTAAGTGAAGGGCGTAGGC 1

RESULT 4
US-09-057-351-22/c
; Sequence 22, Application US/09057351
; Patent No. US20010034439A1
; GENERAL INFORMATION:
; APPLICANT: Villeeponteau, Bryant
; APPLICANT: Feng, Junli
; APPLICANT: Funk, Walter
; APPLICANT: Andrews, William H.
; TITLE OF INVENTION: Mammalian Telomerase
; NUMBER OF SEQUENCES: 42
; CORRESPONDENCE ADDRESS:
; ADDRESSER: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent in Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/057,351
; FILING DATE: 08-APR-1994
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/272,102
; FILING DATE: 07-JUL-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/330,123
; FILING DATE: 27-OCT-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/472,802
; FILING DATE: 07-JUN-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-000821US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200

```

```
; TELFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 22:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 30 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
US-09-057-351-22

Query Match          6.7%; Score 30; DB 1; Length 30;
Best Local Similarity 100.0%; Pred. No. 16;
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 77 TGCTTTTGCTCCCGCGCGCTGTTTTC 106
Db 30 TGCTTTTGCTCCCGCGCGCTGTTTTC 1

RESULT 5
US-09-903-461-2/c
; Sequence 2, Application US/09903461
; Publication No. US20020034756A1
; GENERAL INFORMATION:
; APPLICANT: Letsinger, Robert L.
; APPLICANT: Garimella, Viswanadham
; TITLE OF INVENTION: Method of Detection by Enhancement of Silver Staining
; FILE REFERENCE: 00-1086-A
; CURRENT APPLICATION NUMBER: US/09/903,461
; CURRENT FILING DATE: 2001-07-11
; PRIOR FILING DATE: 2000-07-11
; NUMBER OF SEQ ID NOS: 3
; SOFTWARE: Microsoft Word 98
; SEQ ID NO 2
; LENGTH: 30
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: synthetic oligomer
US-09-903-461-2

Query Match          6.7%; Score 30; DB 1; Length 30;
Best Local Similarity 100.0%; Pred. No. 16;
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 137 CTGCGCGCTTCCACCGTTTCATTCTAGAGC 166
Db 30 CTGCGCGCTTCCACCGTTTCATTCTAGAGC 1

RESULT 6
US-10-359-935-22/c
; Sequence 22, Application US/10359935
; Publication No. US20030153076A1
; GENERAL INFORMATION:
; APPLICANT: Villeponteau, Bryant
; APPLICANT: Feng, Junli
; APPLICANT: Funk, Walter
; APPLICANT: Andrews, William H.
; TITLE OF INVENTION: Mammalian Telomerase
; NUMBER OF SEQUENCES: 42
; CORRESPONDENCE ADDRESSES:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS

; TELFAX: (415) 576-0300
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/10/359,935
; FILING DATE: 07-Feb-2003
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/09/057,351
; FILING DATE: 08-APR-1994
; APPLICATION NUMBER: US 08/272,102
; FILING DATE: 07-JUL-1994
; APPLICATION NUMBER: US 08/330,123
; FILING DATE: 27-OCT-1994
; APPLICATION NUMBER: US 08/472,802
; FILING DATE: 07-JUN-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-000821US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 22:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 30 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
; SEQUENCE DESCRIPTION: SEQ ID NO: 22:
US-10-359-935-22

Query Match          6.7%; Score 30; DB 1; Length 30;
Best Local Similarity 100.0%; Pred. No. 16;
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 77 TGCTTTTGCTCCCGCGCGCTGTTTTC 106
Db 30 TGCTTTTGCTCCCGCGCGCTGTTTTC 1

RESULT 7
US-10-330-872-4/c
; Sequence 4, Application US/10330872
; Publication No. US20030186282A1
; GENERAL INFORMATION:
; APPLICANT: Geron Corporation
; APPLICANT: Weinrich, Scott
; APPLICANT: Atkinson III, Edward
; APPLICANT: Lichtsteiner, Serge
; APPLICANT: Vasserot, Alain
; APPLICANT: Pruzan, Ronald
; TITLE OF INVENTION: Using Purified Telomerase to Identify Telomerase Activators and
; FILE REFERENCE: 011/006C
; CURRENT APPLICATION NUMBER: US/10/330,872
; CURRENT FILING DATE: 2002-12-24
; PRIOR APPLICATION NUMBER: 08/510,736
; PRIOR FILING DATE: 1995-08-04
; PRIOR APPLICATION NUMBER: 08/833,377
; PRIOR FILING DATE: 1997-04-04
; PRIOR APPLICATION NUMBER: 09/420,056
; PRIOR FILING DATE: 1999-10-18
; PRIOR APPLICATION NUMBER: 09/717,828
; PRIOR FILING DATE: 2000-11-20
; NUMBER OF SEQ ID NOS: 11
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 4
; LENGTH: 30
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-330-872-4

Query Match          6.7%; Score 30; DB 1; Length 30;
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Best Local Similarity 100.0%; Pred. No. 16;
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 167 AAACAAAAATGTCAGTCTGCTGCCCGGTTTC 196
Db 30 AAACAAAAATGTCAGTCTGCTGCCCGGTTTC 1

RESULT 8
US-10-330-872-5/c
; Sequence 5, Application US/10330872
; Publication No. US20030186282A1
; GENERAL INFORMATION:
; APPLICANT: Geron Corporation
; APPLICANT: Weinrich, Scott
; APPLICANT: Atkinson III, Edward
; APPLICANT: Lichtsteiner, Serge
; APPLICANT: Vasserot, Alain
; APPLICANT: Pruzan, Ronald
; TITLE OF INVENTION: Using Purified Telomerase to Identify Telomerase Activators and
; FILE REFERENCE: 011/006C
; CURRENT APPLICATION NUMBER: US/10/330,872
; PRIOR FILING DATE: 2002-12-24
; PRIOR FILING DATE: 1995-08-04
; PRIOR APPLICATION NUMBER: 08/510,736
; PRIOR FILING DATE: 1997-04-04
; PRIOR APPLICATION NUMBER: 08/833,377
; PRIOR FILING DATE: 1997-04-04
; PRIOR APPLICATION NUMBER: 09/420,056
; PRIOR FILING DATE: 1999-10-18
; PRIOR APPLICATION NUMBER: 09/717,828
; PRIOR FILING DATE: 2000-11-20
; NUMBER OF SEQ ID NOS: 11
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 5
; LENGTH: 30
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-330-872-5

Query Match 6.7%; Score 30; DB 1; Length 30;
Best Local Similarity 100.0%; Pred. No. 16;
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 137 CCTGCCGCTTCCACCGTTTCATTCTAGAGC 166
Db 30 CCTGCCGCTTCCACCGTTTCATTCTAGAGC 1

RESULT 9
US-10-811-033-4/c
; Sequence 4, Application US/10811033
; Publication No. US2005008983A1
; GENERAL INFORMATION:
; APPLICANT: Geron Corporation
; APPLICANT: Weinrich, Scott
; APPLICANT: Atkinson III, Edward
; APPLICANT: Lichtsteiner, Serge
; APPLICANT: Vasserot, Alain
; APPLICANT: Pruzan, Ronald
; TITLE OF INVENTION: Using Purified Telomerase to Identify Telomerase Activators and
; FILE REFERENCE: 011/006C
; CURRENT APPLICATION NUMBER: US/10/811,033
; CURRENT FILING DATE: 2004-03-26
; PRIOR FILING DATE: 2002-12-24
; PRIOR APPLICATION NUMBER: 08/510,736
; PRIOR FILING DATE: 1995-08-04
; PRIOR APPLICATION NUMBER: 08/833,377
; PRIOR FILING DATE: 1997-04-04
; PRIOR APPLICATION NUMBER: 09/420,056
; PRIOR FILING DATE: 1999-10-18
; NUMBER OF SEQ ID NOS: 11
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 5
; LENGTH: 30
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-811-033-4

Query Match 6.7%; Score 30; DB 1; Length 30;
Best Local Similarity 100.0%; Pred. No. 16;
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 137 CCTGCCGCTTCCACCGTTTCATTCTAGAGC 166
Db 30 CCTGCCGCTTCCACCGTTTCATTCTAGAGC 1

RESULT 10
US-10-811-033-5/c
; Sequence 5, Application US/10811033
; Publication No. US2005008983A1
; GENERAL INFORMATION:
; APPLICANT: Geron Corporation
; APPLICANT: Weinrich, Scott
; APPLICANT: Atkinson III, Edward
; APPLICANT: Lichtsteiner, Serge
; APPLICANT: Vasserot, Alain
; APPLICANT: Pruzan, Ronald
; TITLE OF INVENTION: Using Purified Telomerase to Identify Telomerase Activators and
; FILE REFERENCE: 011/006C
; CURRENT APPLICATION NUMBER: US/10/811,033
; CURRENT FILING DATE: 2004-03-26
; PRIOR FILING DATE: 2002-12-24
; PRIOR APPLICATION NUMBER: 08/510,736
; PRIOR FILING DATE: 1995-08-04
; PRIOR APPLICATION NUMBER: 08/833,377
; PRIOR FILING DATE: 1997-04-04
; PRIOR APPLICATION NUMBER: 09/420,056
; PRIOR FILING DATE: 1999-10-18
; PRIOR APPLICATION NUMBER: 09/717,828
; PRIOR FILING DATE: 2000-11-20
; NUMBER OF SEQ ID NOS: 11
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 5
; LENGTH: 30
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-811-033-5

Query Match 6.7%; Score 30; DB 1; Length 30;
Best Local Similarity 100.0%; Pred. No. 16;
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 137 CCTGCCGCTTCCACCGTTTCATTCTAGAGC 166
Db 30 CCTGCCGCTTCCACCGTTTCATTCTAGAGC 1

RESULT 11
US-10-330-872-3/c
; Sequence 3, Application US/10330872
; Publication No. US20030186282A1
; GENERAL INFORMATION:
; APPLICANT: Geron Corporation
; APPLICANT: Weinrich, Scott
; APPLICANT: Atkinson III, Edward
; APPLICANT: Lichtsteiner, Serge
; APPLICANT: Vasserot, Alain
; APPLICANT: Pruzan, Ronald
```

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; PRIOR APPLICATION NUMBER: 09/717,828
; PRIOR FILING DATE: 2000-11-20
; NUMBER OF SEQ ID NOS: 11
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 4
; LENGTH: 30
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-811-033-4

Query Match 6.7%; Score 30; DB 1; Length 30;
Best Local Similarity 100.0%; Pred. No. 16;
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 167 AAACAAAAATGTCAGTCTGCTGCCCGGTTTC 196
Db 30 AAACAAAAATGTCAGTCTGCTGCCCGGTTTC 1

RESULT 10
US-10-811-033-5/c
; Sequence 5, Application US/10811033
; Publication No. US2005008983A1
; GENERAL INFORMATION:
; APPLICANT: Geron Corporation
; APPLICANT: Weinrich, Scott
; APPLICANT: Atkinson III, Edward
; APPLICANT: Lichtsteiner, Serge
; APPLICANT: Vasserot, Alain
; APPLICANT: Pruzan, Ronald
; TITLE OF INVENTION: Using Purified Telomerase to Identify Telomerase Activators and
; FILE REFERENCE: 011/006C
; CURRENT APPLICATION NUMBER: US/10/811,033
; CURRENT FILING DATE: 2004-03-26
; PRIOR FILING DATE: 2002-12-24
; PRIOR APPLICATION NUMBER: 08/510,736
; PRIOR FILING DATE: 1995-08-04
; PRIOR APPLICATION NUMBER: 08/833,377
; PRIOR FILING DATE: 1997-04-04
; PRIOR APPLICATION NUMBER: 09/420,056
; PRIOR FILING DATE: 1999-10-18
; PRIOR APPLICATION NUMBER: 09/717,828
; PRIOR FILING DATE: 2000-11-20
; NUMBER OF SEQ ID NOS: 11
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 5
; LENGTH: 30
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-811-033-5

Query Match 6.7%; Score 30; DB 1; Length 30;
Best Local Similarity 100.0%; Pred. No. 16;
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 137 CCTGCCGCTTCCACCGTTTCATTCTAGAGC 166
Db 30 CCTGCCGCTTCCACCGTTTCATTCTAGAGC 1

RESULT 11
US-10-330-872-3/c
; Sequence 3, Application US/10330872
; Publication No. US20030186282A1
; GENERAL INFORMATION:
; APPLICANT: Geron Corporation
; APPLICANT: Weinrich, Scott
; APPLICANT: Atkinson III, Edward
; APPLICANT: Lichtsteiner, Serge
; APPLICANT: Vasserot, Alain
; APPLICANT: Pruzan, Ronald
```

**Qy** 412 GAGCTGTGGACGTCACCCAGGACTCGGC 441  
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**Db** 30 GAGCTATGGACGTCACCCAGGACTCGGC 1

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RESULT 13
US-09-057-351-23/c
; Sequence 23, Application US/09057351
; Patent No. US20010034439A1
; GENERAL INFORMATION:
; APPLICANT: Villeponteau, Bryant
; APPLICANT: Feng, Junli
; APPLICANT: Funk, Walter
; APPLICANT: Andrews, William H.
; TITLE OF INVENTION: Mammalian Telomerase
; NUMBER OF SEQUENCES: 42
; CORRESPONDENCE ADDRESS:
; ADDRESSES: Townsend and Townsend and
; STREET: Two Embarcadero Center, Eighth
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Versi
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/057,351
; FILING DATE: 08-APR-1994
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/272,102
; FILING DATE: 07-JUL-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/330,123
; FILING DATE: 27-OCT-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/472,802
; FILING DATE: 07-JUN-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-00081
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 23:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 26 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
US-09-057-351-23
; Query Match 5.8%; Score 26; D
; Best Local similarity 100.0%; Pred. No. 3
; Matches 26; Conservative 0; Mismatch
QY 145 CTTCCACCGTTCATTCTAGAGCAAC 170
Db 26 CTTCCACCGTTCATTCTAGAGCAAC 1
RESULT 14
US-09-057-351-30
; Sequence 30, Application US/09057351
; Patent No. US20010034439A1
; GENERAL INFORMATION:
; APPLICANT: Villeponteau, Bryant
; APPLICANT: Feng, Junli
; APPLICANT: Funk, Walter
; APPLICANT: Andrews, William H.
; TITLE OF INVENTION: Mammalian Telomerase
; NUMBER OF SEQUENCES: 42
; CORRESPONDENCE ADDRESS:

```

ADDRESSEE: Townsend and Townsend and Crew LLP  
STREET: Two Embarcadero Center, Eighth Floor  
CITY: San Francisco  
STATE: California  
COUNTRY: USA  
ZIP: 94111-3834  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/09/057,351  
FILING DATE: 08-APR-1994  
CLASSIFICATION: 435  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/272,102  
FILING DATE: 07-JUL-1994  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/330,123  
FILING DATE: 27-OCT-1994  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/472,802  
FILING DATE: 07-JUN-1995  
ATTORNEY/AGENT INFORMATION:  
NAME: Storella, John R.  
REGISTRATION NUMBER: 32,944  
REFERENCE/DOCKET NUMBER: 015389-000821US  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (415) 576-0200  
TELEFAX: (415) 576-0300  
INFORMATION FOR SEQ ID NO: 30:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 26 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: DNA  
US-09-057-351-30

Query Match 5.8%; Score 26; DB 1; Length 26;  
Best Local Similarity 100.0%; Pred. No. 30;  
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 45 TCTAACCCCTAACTGAGAGGGCGGTAG 70  
|||||  
Db 1 TCTAACCCCTAACTGAGAGGGCGGTAG 26

RESULT 15  
US-09-895-606-25  
Sequence 25, Application US/09895606  
Publication No. US20030207404A1  
GENERAL INFORMATION:  
APPLICANT: Villeponteau, Bryant  
Feng, Junli  
Andrews, William H.  
Adams, Robert R.

TITLE OF INVENTION: Methods and Reagents for Regulating  
Telomere Length and Telomerase Activity

NUMBER OF SEQUENCES: 26  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Townsend and Townsend and Crew LLP  
STREET: Two Embarcadero Center, Eighth Floor  
CITY: San Francisco  
STATE: California  
COUNTRY: USA  
ZIP: 94111-3834

COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.30

CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/09/895,606  
FILING DATE: 29-Jun-2001  
CLASSIFICATION: <Unknown>  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 08/710,249  
FILING DATE: <Unknown>  
APPLICATION NUMBER: US 60/003,492  
FILING DATE: 08-SEP-1995  
ATTORNEY/AGENT INFORMATION:  
NAME: Storella, John R.  
REGISTRATION NUMBER: 32,944  
REFERENCE/DOCKET NUMBER: 015389-001220US  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (415) 576-0200  
TELEFAX: (415) 576-0300  
INFORMATION FOR SEQ ID NO: 25:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 26 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: DNA  
SEQUENCE DESCRIPTION: SEQ ID NO: 25:  
US-09-895-606-25  
Query Match 5.8%; Score 26; DB 1; Length 26;  
Best Local Similarity 100.0%; Pred. No. 30;  
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Qy 45 TCTAACCCCTAACTGAGAGGGCGGTAG 70  
|||||  
Db 1 TCTAACCCCTAACTGAGAGGGCGGTAG 26  
RESULT 16  
US-09-895-606-26/c  
Sequence 26, Application US/09895606  
Publication No. US20030207404A1  
GENERAL INFORMATION:  
APPLICANT: Villeponteau, Bryant  
Feng, Junli  
Andrews, William H.  
Adams, Robert R.  
TITLE OF INVENTION: Methods and Reagents for Regulating  
Telomere Length and Telomerase Activity  
NUMBER OF SEQUENCES: 26  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Townsend and Townsend and Crew LLP  
STREET: Two Embarcadero Center, Eighth Floor  
CITY: San Francisco  
STATE: California  
COUNTRY: USA  
ZIP: 94111-3834  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/09/895,606  
FILING DATE: 29-Jun-2001  
CLASSIFICATION: <Unknown>  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 08/710,249  
FILING DATE: <Unknown>  
APPLICATION NUMBER: US 60/003,492  
FILING DATE: 08-SEP-1995  
ATTORNEY/AGENT INFORMATION:  
NAME: Storella, John R.  
REGISTRATION NUMBER: 32,944  
REFERENCE/DOCKET NUMBER: 015389-001220US  
TELECOMMUNICATION INFORMATION:

```
;
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 26:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 26 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; MOLECULE TYPE: DNA
; TOPOLOGY: linear
; SEQUENCE DESCRIPTION: SEQ ID NO: 26:
US-09-895-606-26

Query Match          5.8%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 30;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      145 CTTCCACCGTTCATTCTAGAGCAAC 170
Db      26 CTTCCACCGTTCATTCTAGAGCAAC 1

RESULT 17
US-10-044-692-311
; Sequence 311, Application US/10044692
; Publication No. US20030096344A1
; GENERAL INFORMATION:
; APPLICANT: Cech, Thomas R.
; Lingner, Joachim
; Nakamura, Toru
; Chapman, Karen B.
; Morin, Gregg B.
; Harley, Calvin
; Andrews, William H.
; TITLE OF INVENTION: HUMAN TELOMERASE CATALYTIC SUBUNIT: DIAGNOSTIC AND
; THERAPEUTIC METHODS
; NUMBER OF SEQUENCES: 335
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, 8th Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: United States of America
; ZIP: 94111
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/10/044,692
; FILING DATE: 11-Jan-2002
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/912,951
; FILING DATE: <Unknown>
; APPLICATION NUMBER: US 08/854,050
; FILING DATE: 09-MAY-1997
; APPLICATION NUMBER: US 08/851,843
; FILING DATE: 06-MAY-1997
; APPLICATION NUMBER: US 08/846,017
; FILING DATE: 25-APR-1997
; APPLICATION NUMBER: US 08/844,419
; FILING DATE: 18-APR-1997
; APPLICATION NUMBER: US 08/724,643
; FILING DATE: 01-OCT-1996
; ATTORNEY/AGENT INFORMATION:
; NAME: Apple, Randolph T.
; REGISTRATION NUMBER: 36,429
; REFERENCE/DOCKET NUMBER: 015389-002600US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 311:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 26 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; MOLECULE TYPE: DNA
; TOPOLOGY: linear
; SEQUENCE DESCRIPTION: SEQ ID NO: 311:
US-10-044-692-311

Query Match          5.8%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 30;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      45 TCTAACCCCTAACTGAGAGGGCGTAG 70
Db      1 TCTAACCCCTAACTGAGAGGGCGTAG 26

RESULT 18
US-10-044-692-312/c
; Sequence 312, Application US/10044692
; Publication No. US20030096344A1
; GENERAL INFORMATION:
; APPLICANT: Cech, Thomas R.
; Lingner, Joachim
; Nakamura, Toru
; Chapman, Karen B.
; Morin, Gregg B.
; Harley, Calvin
; Andrews, William H.
; TITLE OF INVENTION: HUMAN TELOMERASE CATALYTIC SUBUNIT: DIAGNOSTIC AND
; THERAPEUTIC METHODS
; NUMBER OF SEQUENCES: 335
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, 8th Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: United States of America
; ZIP: 94111
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/10/044,692
; FILING DATE: 11-Jan-2002
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/912,951
; FILING DATE: <Unknown>
; APPLICATION NUMBER: US 08/854,050
; FILING DATE: 09-MAY-1997
; APPLICATION NUMBER: US 08/851,843
; FILING DATE: 06-MAY-1997
; APPLICATION NUMBER: US 08/846,017
; FILING DATE: 25-APR-1997
; APPLICATION NUMBER: US 08/844,419
; FILING DATE: 18-APR-1997
; APPLICATION NUMBER: US 08/724,643
; FILING DATE: 01-OCT-1996
; ATTORNEY/AGENT INFORMATION:
; NAME: Apple, Randolph T.
; REGISTRATION NUMBER: 36,429
; REFERENCE/DOCKET NUMBER: 015389-002600US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 312:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 26 base pairs
; TYPE: nucleic acid
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; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
; SEQUENCE DESCRIPTION: SEQ ID NO: 312:
US-10-044-692-312
Query Match      5.8%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 30;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 145 CTTCCACCGTTTCATTCTAGAGCAAC 170
Db 26 CTTCCACCGTTTCATTCTAGAGCAAC 1

RESULT 19
US-10-044-539-311
; Sequence 311, Application US/10044539
; Publication No. US20030100093A1
; GENERAL INFORMATION:
; APPLICANT: Cech, Thomas R.
; Lingner, Joachim
; Nakamura, Toru
; Chapman, Karen B.
; Morin, Gregg B.
; Harley, Calvin
; Andrews, William H.
;
; TITLE OF INVENTION: HUMAN TELOMERASE CATALYTIC SUBUNIT: DIAGNOSTIC AND
; THERAPEUTIC METHODS
;
; NUMBER OF SEQUENCES: 335
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, 8th Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: United States of America
; ZIP: 94111
;
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/10/044,539
; FILING DATE: 11-Jan-2002
; CLASSIFICATION: 435
;
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/912,951
; FILING DATE: <Unknown>
; APPLICATION NUMBER: US 08/854,050
; FILING DATE: 09-MAY-1997
; APPLICATION NUMBER: US 08/851,843
; FILING DATE: 06-MAY-1997
; APPLICATION NUMBER: US 08/846,017
; FILING DATE: 25-APR-1997
; APPLICATION NUMBER: US 08/844,419
; FILING DATE: 18-APR-1997
; APPLICATION NUMBER: US 08/724,643
; FILING DATE: 01-OCT-1996
;
; ATTORNEY/AGENT INFORMATION:
; NAME: Apple, Randolph T.
; REGISTRATION NUMBER: 36,429
; REFERENCE/DOCKET NUMBER: 015389-0026000S
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
;
; INFORMATION FOR SEQ ID NO: 311:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 26 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA

; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
; SEQUENCE DESCRIPTION: SEQ ID NO: 312:
US-10-044-539-311
Query Match      5.8%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 30;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 45 TCTAACCCCTAACTGAGAGGGCGTAG 70
Db 1 TCTAACCCCTAACTGAGAGGGCGTAG 26

RESULT 20
US-10-044-539-312/c
; Sequence 312, Application US/10044539
; Publication No. US20030100093A1
; GENERAL INFORMATION:
; APPLICANT: Cech, Thomas R.
; Lingner, Joachim
; Nakamura, Toru
; Chapman, Karen B.
; Morin, Gregg B.
; Harley, Calvin
; Andrews, William H.
;
; TITLE OF INVENTION: HUMAN TELOMERASE CATALYTIC SUBUNIT: DIAGNOSTIC AND
; THERAPEUTIC METHODS
;
; NUMBER OF SEQUENCES: 335
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, 8th Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: United States of America
; ZIP: 94111
;
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/10/044,539
; FILING DATE: 11-Jan-2002
; CLASSIFICATION: 435
;
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/912,951
; FILING DATE: <Unknown>
; APPLICATION NUMBER: US 08/854,050
; FILING DATE: 09-MAY-1997
; APPLICATION NUMBER: US 08/851,843
; FILING DATE: 06-MAY-1997
; APPLICATION NUMBER: US 08/846,017
; FILING DATE: 25-APR-1997
; APPLICATION NUMBER: US 08/844,419
; FILING DATE: 18-APR-1997
; APPLICATION NUMBER: US 08/724,643
; FILING DATE: 01-OCT-1996
;
; ATTORNEY/AGENT INFORMATION:
; NAME: Apple, Randolph T.
; REGISTRATION NUMBER: 36,429
; REFERENCE/DOCKET NUMBER: 015389-0026000S
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
;
; INFORMATION FOR SEQ ID NO: 312:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 26 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
; SEQUENCE DESCRIPTION: SEQ ID NO: 312:
US-10-044-539-312
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Query Match 5.8%; Score 26; DB 1; Length 26;  
Best Local Similarity 100.0%; Pred. No. 30;  
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 145 CTTCCACCGTTCATTCTAGACAAAC 170  
|||||  
Db 26 CTTCCACCGTTCATTCTAGACAAAC 1

## RESULT 21

US-10-359-935-23/c

; Sequence 23, Application US/10359935

; Publication No. US20030153076A1

; GENERAL INFORMATION:

; APPLICANT: Villeponteau, Bryant

; Feng, Junli

; Funk, Walter

; Andrews, William H.

; TITLE OF INVENTION: Mammalian Telomerase

; NUMBER OF SEQUENCES: 42

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: Townsend and Townsend and Crew LLP

; STREET: Two Embarcadero Center, Eighth Floor

; CITY: San Francisco

; STATE: California

; COUNTRY: USA

; ZIP: 94111-3834

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: Patent in Release #1.0, Version #1.30

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/10/359,935

; FILING DATE: 07-Feb-2003

; CLASSIFICATION: 435

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US/09/057,351

; FILING DATE: 08-APR-1994

; APPLICATION NUMBER: US 08/272,102

; FILING DATE: 07-JUL-1994

; APPLICATION NUMBER: US 08/330,123

; FILING DATE: 27-OCT-1994

; APPLICATION NUMBER: US 08/472,802

; FILING DATE: 07-JUN-1995

; ATTORNEY/AGENT INFORMATION:

; NAME: Storella, John R.

; REGISTRATION NUMBER: 32,944

; REFERENCE/DOCKET NUMBER: 015389-000821US

; TELECOMMUNICATION INFORMATION:

; TELEPHONE: (415) 576-0200

; TELEFAX: (415) 576-0300

; INFORMATION FOR SEQ ID NO: 23:

; SEQUENCE CHARACTERISTICS:

; LENGTH: 26 base pairs

; TYPE: nucleic acid

; STRANDEDNESS: single

; TOPOLOGY: linear

; MOLECULE TYPE: DNA

; SEQUENCE DESCRIPTION: SEQ ID NO: 23:

US-10-359-935-23

Query Match 5.8%; Score 26; DB 1; Length 26;  
Best Local Similarity 100.0%; Pred. No. 30;  
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 145 CTTCCACCGTTCATTCTAGACAAAC 170  
|||||  
Db 26 CTTCCACCGTTCATTCTAGACAAAC 1

## RESULT 22

US-10-359-935-30

; Sequence 30, Application US/10359935  
; Publication No. US20030153076A1  
; GENERAL INFORMATION:

; APPLICANT: Villeponteau, Bryant

; Feng, Junli

; Funk, Walter

; Andrews, William H.

; TITLE OF INVENTION: Mammalian Telomerase

; NUMBER OF SEQUENCES: 42

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: Townsend and Townsend and Crew LLP

; STREET: Two Embarcadero Center, Eighth Floor

; CITY: San Francisco

; STATE: California

; COUNTRY: USA

; ZIP: 94111-3834

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: Patent in Release #1.0, Version #1.30

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/10/359,935

; FILING DATE: 07-Feb-2003

; CLASSIFICATION: 435

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US/09/057,351

; FILING DATE: 08-APR-1994

; APPLICATION NUMBER: US 08/272,102

; FILING DATE: 07-JUL-1994

; APPLICATION NUMBER: US 08/330,123

; FILING DATE: 27-OCT-1994

; APPLICATION NUMBER: US 08/472,802

; FILING DATE: 07-JUN-1995

; ATTORNEY/AGENT INFORMATION:

; NAME: Storella, John R.

; REGISTRATION NUMBER: 32,944

; REFERENCE/DOCKET NUMBER: 015389-000821US

; TELECOMMUNICATION INFORMATION:

; TELEPHONE: (415) 576-0200

; TELEFAX: (415) 576-0300

; INFORMATION FOR SEQ ID NO: 30:

; SEQUENCE CHARACTERISTICS:

; LENGTH: 26 base pairs

; TYPE: nucleic acid

; STRANDEDNESS: single

; TOPOLOGY: linear

; MOLECULE TYPE: DNA

; SEQUENCE DESCRIPTION: SEQ ID NO: 30:

US-10-359-935-30

Query Match 5.8%; Score 26; DB 1; Length 26;  
Best Local Similarity 100.0%; Pred. No. 30;  
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 45 TCTAACCCCTAACTGAGAGGGCGTAG 70  
|||||  
Db 1 TCTAACCCCTAACTGAGAGGGCGTAG 26

## RESULT 23

US-10-325-810-597

; Sequence 597, Application US/10325810

; Publication No. US20030204069A1

; GENERAL INFORMATION:

; APPLICANT: Cech, Thomas R.

; Lingner, Joachim

; Nakamura, Toru

; Chapman, Karen B.

; Morin, Gregg B.

; Harley, Calvin B.

; Andrews, William H.

; TITLE OF INVENTION: Human Telomerase Catalytic Subunit

NUMBER OF SEQUENCES: 633  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Townsend and Townsend and Crew LLP  
STREET: Two Embarcadero Center, Eighth Floor  
CITY: San Francisco  
STATE: California  
COUNTRY: USA  
ZIP: 94111-3834  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/10/325,810  
FILING DATE: 20-Dec-2002  
CLASSIFICATION: <Unknown>  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US/09/402,181  
FILING DATE: 29-Sep-1997  
APPLICATION NUMBER: US 08/724,643  
FILING DATE: 01-OCT-1996  
APPLICATION NUMBER: US 08/844,419  
FILING DATE: 18-APR-1997  
APPLICATION NUMBER: US 08/846,017  
FILING DATE: 25-APR-1997  
APPLICATION NUMBER: US 08/851,843  
FILING DATE: 06-MAY-1997  
APPLICATION NUMBER: US 08/854,050  
FILING DATE: 09-MAY-1997  
APPLICATION NUMBER: US 08/911,312  
FILING DATE: 14-AUG-1997  
APPLICATION NUMBER: US 08/912,951  
FILING DATE: 14-AUG-1997  
APPLICATION NUMBER: US 08/915,503  
FILING DATE: 14-AUG-1997  
APPLICATION NUMBER: WO PCT/US97/17885  
FILING DATE: 01-OCT-1997  
ATTORNEY/AGENT INFORMATION:  
NAME: Aussenhus, Scott L.  
REGISTRATION NUMBER: 42,271  
REFERENCE/DOCKET NUMBER: 015389-002620US  
TELEPHONE: (415) 576-0200  
TELEFAX: (415) 576-0300  
INFORMATION FOR SEQ ID NO: 597:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 26 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
MOLECULE TYPE: DNA  
FEATURE:  
NAME/KEY: -  
LOCATION: 1..26  
OTHER INFORMATION: /note= "F3b primer"  
SEQUENCE DESCRIPTION: SEQ ID NO: 597:  
US-10-325-810-597  
Query Match 5.8%; Score 26; DB 1; Length 26;  
Best Local Similarity 100.0%; Pred. No. 30;  
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 45 TCTAACCTTAACCTGAGAAGGCGTAG 70  
Db 1 TCTAACCTTAACCTGAGAAGGCGTAG 26  
RESULT 24  
US-10-325-810-598/c  
; Sequence 598, Application US/10325810  
; Publication No. US20030204069A1  
; GENERAL INFORMATION:

APPLICANT: Cech, Thomas R.  
Lingner, Joachim  
Nakamura, Toru  
Chapman, Karen B.  
Morin, Gregg B.  
Harley, Calvin B.  
Andrews, William H.  
TITLE OF INVENTION: Human Telomerase Catalytic Subunit  
NUMBER OF SEQUENCES: 633  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Townsend and Townsend and Crew LLP  
STREET: Two Embarcadero Center, Eighth Floor  
CITY: San Francisco  
STATE: California  
COUNTRY: USA  
ZIP: 94111-3834  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/10/325,810  
FILING DATE: 20-Dec-2002  
CLASSIFICATION: <Unknown>  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US/09/402,181  
FILING DATE: 29-Sep-1997  
APPLICATION NUMBER: US 08/724,643  
FILING DATE: 01-OCT-1996  
APPLICATION NUMBER: US 08/844,419  
FILING DATE: 18-APR-1997  
APPLICATION NUMBER: US 08/846,017  
FILING DATE: 25-APR-1997  
APPLICATION NUMBER: US 08/851,843  
FILING DATE: 06-MAY-1997  
APPLICATION NUMBER: US 08/854,050  
FILING DATE: 09-MAY-1997  
APPLICATION NUMBER: US 08/911,312  
FILING DATE: 14-AUG-1997  
APPLICATION NUMBER: US 08/912,951  
FILING DATE: 14-AUG-1997  
APPLICATION NUMBER: US 08/915,503  
FILING DATE: 14-AUG-1997  
APPLICATION NUMBER: WO PCT/US97/17885  
FILING DATE: 01-OCT-1997  
ATTORNEY/AGENT INFORMATION:  
NAME: Aussenhus, Scott L.  
REGISTRATION NUMBER: 42,271  
REFERENCE/DOCKET NUMBER: 015389-002620US  
TELEPHONE: (415) 576-0200  
TELEFAX: (415) 576-0300  
INFORMATION FOR SEQ ID NO: 598:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 26 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
MOLECULE TYPE: DNA  
FEATURE:  
NAME/KEY: -  
LOCATION: 1..26  
OTHER INFORMATION: /note= "R3c primer"  
SEQUENCE DESCRIPTION: SEQ ID NO: 598:  
US-10-325-810-598  
Query Match 5.8%; Score 26; DB 1; Length 26;  
Best Local Similarity 100.0%; Pred. No. 30;  
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 145 CTTCCACCGTTCATTCTAGACGAAC 170  
|||||



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; INFORMATION FOR SEQ ID NO: 598:
; SEQUENCE CHARACTERISTICS:
;   LENGTH: 26 base pairs
;   TYPE: nucleic acid
;   STRANDEDNESS: single
;   TOPOLOGY: linear
;   MOLECULE TYPE: DNA
;   FEATURE:
;     NAME/KEY: -
;     LOCATION: 1..26
;     OTHER INFORMATION: /note= "R3c primer"
;   SEQUENCE DESCRIPTION: SEQ ID NO: 598:
US-10-877-124-598

Query Match          5.8%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 30;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 145 CTTCCACCGTTCATTCTAGAGCAAAAC 170
Db 26 CTTCCACCGTTCATTCTAGAGCAAAAC 1

RESULT 27
US-10-877-022-597
; Sequence 597, Application US/10877022
; Publication No. US20040247613A1
; GENERAL INFORMATION:
; APPLICANT: Cech, Thomas R.
;   Lingner, Joachim
;   Nakamura, Toru
;   Chapman, Karen B.
;   Morin, Gregg B.
;   Harley, Calvin B.
;   Andrews, William H.
; TITLE OF INVENTION: Human Telomerase Catalytic Subunit
; NUMBER OF SEQUENCES: 727
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/10/877,022
; FILING DATE: 24-Jun-2004
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/09/432,503
; FILING DATE: 02-Nov-1999
; APPLICATION NUMBER: 08/974,549
; FILING DATE: <Unknown>
; APPLICATION NUMBER: US 08/844,419
; FILING DATE: 18-APR-1997
; APPLICATION NUMBER: US 08/846,017
; FILING DATE: 25-APR-1997
; APPLICATION NUMBER: US 08/851,843
; FILING DATE: 06-MAY-1997
; APPLICATION NUMBER: US 08/854,050
; FILING DATE: 09-MAY-1997
; APPLICATION NUMBER: US 08/911,312
; FILING DATE: 14-AUG-1997
; APPLICATION NUMBER: US 08/912,951
; FILING DATE: 14-AUG-1997
; APPLICATION NUMBER: US 08/915,503
; FILING DATE: 14-AUG-1997
; APPLICATION NUMBER: WO PCT/US97/17618
```

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; FILING DATE: 01-OCT-1997
; APPLICATION NUMBER: WO PCT/US97/17885
; FILING DATE: 01-OCT-1997
; ATTORNEY/AGENT INFORMATION:
;   NAME: Apple, Randolph Ted
;   REGISTRATION NUMBER: 36,429
;   REFERENCE/DOCKET NUMBER: 015389-002610US
; TELECOMMUNICATION INFORMATION:
;   TELEPHONE: (415) 576-0200
;   TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 597:
; SEQUENCE CHARACTERISTICS:
;   LENGTH: 26 base pairs
;   TYPE: nucleic acid
;   STRANDEDNESS: single
;   TOPOLOGY: linear
;   MOLECULE TYPE: DNA
;   FEATURE:
;     NAME/KEY: -
;     LOCATION: 1..26
;     OTHER INFORMATION: /note= "F3b primer"
;   SEQUENCE DESCRIPTION: SEQ ID NO: 597:
US-10-877-022-597

Query Match          5.8%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 30;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 45 TCTAACCTTAAGTGAAGGGCGGTAG 70
Db 1 TCTAACCTTAAGTGAAGGGCGGTAG 26

RESULT 28
US-10-877-022-598/c
; Sequence 598, Application US/10877022
; Publication No. US20040247613A1
; GENERAL INFORMATION:
; APPLICANT: Cech, Thomas R.
;   Lingner, Joachim
;   Nakamura, Toru
;   Chapman, Karen B.
;   Morin, Gregg B.
;   Harley, Calvin B.
;   Andrews, William H.
; TITLE OF INVENTION: Human Telomerase Catalytic Subunit
; NUMBER OF SEQUENCES: 727
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/10/877,022
; FILING DATE: 24-Jun-2004
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/09/432,503
; FILING DATE: 02-Nov-1999
; APPLICATION NUMBER: 08/974,549
; FILING DATE: <Unknown>
; APPLICATION NUMBER: US 08/844,419
; FILING DATE: 18-APR-1997
; APPLICATION NUMBER: US 08/846,017
; FILING DATE: 25-APR-1997
; APPLICATION NUMBER: US 08/851,843
```

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; FILING DATE: 06-MAY-1997
; APPLICATION NUMBER: US 08/854,050
; FILING DATE: 09-MAY-1997
; APPLICATION NUMBER: US 08/911,312
; FILING DATE: 14-AUG-1997
; APPLICATION NUMBER: US 08/912,951
; FILING DATE: 14-AUG-1997
; APPLICATION NUMBER: US 08/915,503
; FILING DATE: 14-AUG-1997
; APPLICATION NUMBER: WO PCT/US97/17618
; FILING DATE: 01-OCT-1997
; APPLICATION NUMBER: WO PCT/US97/17885
; FILING DATE: 01-OCT-1997
; ATTORNEY/AGENT INFORMATION:
; NAME: Apple, Randolph Ted
; REGISTRATION NUMBER: 36,429
; REFERENCE/DOCKET NUMBER: 015389-002610US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 598:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 26 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
; FEATURE:
; NAME/KEY: -
; LOCATION: 1..26
; OTHER INFORMATION: /note= "R3c primer"
; SEQUENCE DESCRIPTION: SEQ ID NO: 598:
US-10-877-022-598
Query Match 5.8%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 30;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 145 CTTCCACCGTTCATTCTAGAGCAAAAC 170
Db 26 CTTCCACCGTTCATTCTAGAGCAAAAC 1

RESULT 29
US-10-877-146-597
; Sequence 597, Application US/10877146
; Publication No. US20050013825A1
; GENERAL INFORMATION:
; APPLICANT: Cech, Thomas R.
; Lingner, Joachim
; Nakamura, Toru
; Chapman, Karen B.
; Morin, Gregg B.
; Harley, Calvin B.
; Andrews, William H.
; TITLE OF INVENTION: Human Telomerase Catalytic Subunit
; NUMBER OF SEQUENCES: 727
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/10/877,146
; FILING DATE: 24-Jun-2004
; CLASSIFICATION: <Unknown>

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; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/09/432,503
; FILING DATE: 02-Nov-1999
; APPLICATION NUMBER: 08/974,549
; FILING DATE: <Unknown>
; APPLICATION NUMBER: US 08/844,419
; FILING DATE: 18-APR-1997
; APPLICATION NUMBER: US 08/846,017
; FILING DATE: 25-APR-1997
; APPLICATION NUMBER: US 08/851,843
; FILING DATE: 06-MAY-1997
; APPLICATION NUMBER: US 08/854,050
; FILING DATE: 09-MAY-1997
; APPLICATION NUMBER: US 08/911,312
; FILING DATE: 14-AUG-1997
; APPLICATION NUMBER: US 08/912,951
; FILING DATE: 14-AUG-1997
; APPLICATION NUMBER: US 08/915,503
; FILING DATE: 14-AUG-1997
; APPLICATION NUMBER: WO PCT/US97/17618
; FILING DATE: 01-OCT-1997
; APPLICATION NUMBER: WO PCT/US97/17885
; FILING DATE: 01-OCT-1997
; ATTORNEY/AGENT INFORMATION:
; NAME: Apple, Randolph Ted
; REGISTRATION NUMBER: 36,429
; REFERENCE/DOCKET NUMBER: 015389-002610US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 597:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 26 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
; FEATURE:
; NAME/KEY: -
; LOCATION: 1..26
; OTHER INFORMATION: /note= "F3b primer"
; SEQUENCE DESCRIPTION: SEQ ID NO: 597:
US-10-877-146-597
Query Match 5.8%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 30;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 45 TCTAACCCCTAACTGAGAGGGCGTAG 70
Db 1 TCTAACCCCTAACTGAGAGGGCGTAG 26

RESULT 30
US-10-877-146-598/c
; Sequence 598, Application US/10877146
; Publication No. US20050013825A1
; GENERAL INFORMATION:
; APPLICANT: Cech, Thomas R.
; Lingner, Joachim
; Nakamura, Toru
; Chapman, Karen B.
; Morin, Gregg B.
; Harley, Calvin B.
; Andrews, William H.
; TITLE OF INVENTION: Human Telomerase Catalytic Subunit
; NUMBER OF SEQUENCES: 727
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA

```

```

;
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/10/877,146
; FILING DATE: 24-Jun-2004
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/09/432,503
; FILING DATE: 02-Nov-1999
; APPLICATION NUMBER: 08/974,549
; FILING DATE: <Unknown>
; APPLICATION NUMBER: US 08/844,419
; FILING DATE: 18-APR-1997
; APPLICATION NUMBER: US 08/846,017
; FILING DATE: 25-APR-1997
; APPLICATION NUMBER: US 08/851,843
; FILING DATE: 06-MAY-1997
; APPLICATION NUMBER: US 08/854,050
; FILING DATE: 09-MAY-1997
; APPLICATION NUMBER: US 08/911,312
; FILING DATE: 14-AUG-1997
; APPLICATION NUMBER: US 08/912,951
; FILING DATE: 14-AUG-1997
; APPLICATION NUMBER: US 08/915,503
; FILING DATE: 14-AUG-1997
; APPLICATION NUMBER: WO PCT/US97/17618
; FILING DATE: 01-OCT-1997
; APPLICATION NUMBER: WO PCT/US97/17885
; FILING DATE: 01-OCT-1997
; ATTORNEY/AGENT INFORMATION:
; NAME: Apple, Randolph Ted
; REGISTRATION NUMBER: 36,429
; REFERENCE/DOCKET NUMBER: 015389-002610US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 598:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 26 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
; FEATURE:
; NAME/KEY: -
; LOCATION: 1..26
; OTHER INFORMATION: /note= "R3c primer"
; SEQUENCE DESCRIPTION: SEQ ID NO: 598:
US-10-877-146-598

Query Match 5.8%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 30;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 145 CTTCCACCGTTTCATTCTAGAGCAAC 170
Db 26 CTTCCACCGTTTCATTCTAGAGCAAC 1

RESULT 31
US-09-057-351-29/c
; Sequence 29, Application US/09057351
; Patent No. US20010034439A1
; GENERAL INFORMATION:
; APPLICANT: Villeponteau, Bryant
; APPLICANT: Feng, Junli
; APPLICANT: Funk, Walter
; APPLICANT: Andrews, William H.
; TITLE OF INVENTION: Mammalian Telomerase

```

```

; NUMBER OF SEQUENCES: 42
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/057,351
; FILING DATE: 08-APR-1994
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/272,102
; FILING DATE: 07-JUL-1994
; APPLICATION NUMBER: US 08/330,123
; FILING DATE: 27-OCT-1994
; APPLICATION NUMBER: US 08/472,802
; FILING DATE: 07-JUN-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-000821US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 29:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 28 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
; US-09-057-351-29

Query Match 5.5%; Score 25; DB 1; Length 28;
Best Local Similarity 100.0%; Pred. No. 46;
Matches 25; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 81 TTGTCTCCCGCGCGTGTCTTCT 105
Db 25 TTGTCTCCCGCGCGTGTCTTCT 1

RESULT 32
US-10-359-935-29/c
; Sequence 29, Application US/10359935
; Publication No. US20030153076A1
; GENERAL INFORMATION:
; APPLICANT: Villeponteau, Bryant
; APPLICANT: Feng, Junli
; APPLICANT: Funk, Walter
; APPLICANT: Andrews, William H.
; TITLE OF INVENTION: Mammalian Telomerase
; NUMBER OF SEQUENCES: 42
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS

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; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/10/359,935
; FILING DATE: 07-Feb-2003
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/09/057,351
; FILING DATE: 08-APR-1994
; APPLICATION NUMBER: US 08/272,102
; FILING DATE: 07-JUL-1994
; APPLICATION NUMBER: US 08/330,123
; FILING DATE: 27-OCT-1994
; APPLICATION NUMBER: US 08/472,802
; FILING DATE: 07-JUN-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-000821US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 29:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 28 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
; SEQUENCE DESCRIPTION: SEQ ID NO: 29:
US-10-359-935-29
Query Match 5.3%; Score 25; DB 1; Length 28;
Best Local Similarity 100.0%; Pred. No. 46;
Matches 25; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 81 TTGCTCCCGCGCGCTGTTTCT 105
Db 25 TTGCTCCCGCGCGCTGTTTCT 1

RESULT 33
US-09-018-125-4
; Sequence 4, Application US/09018125A
; Patent No. US20010007902A1
; GENERAL INFORMATION:
; APPLICANT: Silverman, Robert H.
; APPLICANT: Kondo, Seiji
; APPLICANT: Cowell, John K.
; APPLICANT: Li, Guiying
; APPLICANT: Torrence, Paul F.
; TITLE OF INVENTION: RNASE L ACTIVATORS AND ANTISENSE OLIGONUCLEOTIDES
; FILE REFERENCE: 8656-022
; CURRENT APPLICATION NUMBER: US/09/018,125A
; CURRENT FILING DATE: 1999-02-03
; EARLIER APPLICATION NUMBER: 60/044,507
; EARLIER FILING DATE: 1997-04-21
; NUMBER OF SEQ ID NOS: 9
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 4
; LENGTH: 24
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: primer
US-09-018-125-4
Query Match 5.3%; Score 24; DB 1; Length 24;
Best Local Similarity 100.0%; Pred. No. 41;
Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 41 TTGCTTAACCCCTAACTGAGAAGG 64
Db 25 TTGCTCCCGCGCGCTGTTTCT 1
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```
Db 1 TTGCTTAACCCCTAACTGAGAAGG 24

RESULT 34
US-09-018-125-5/c
; Sequence 5, Application US/09018125A
; Patent No. US20010007902A1
; GENERAL INFORMATION:
; APPLICANT: Silverman, Robert H.
; APPLICANT: Kondo, Seiji
; APPLICANT: Cowell, John K.
; APPLICANT: Li, Guiying
; APPLICANT: Torrence, Paul F.
; TITLE OF INVENTION: RNASE L ACTIVATORS AND ANTISENSE OLIGONUCLEOTIDES
; FILE REFERENCE: 8656-022
; CURRENT APPLICATION NUMBER: US/09/018,125A
; CURRENT FILING DATE: 1999-02-03
; EARLIER APPLICATION NUMBER: 60/044,507
; EARLIER FILING DATE: 1997-04-21
; NUMBER OF SEQ ID NOS: 9
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 5
; LENGTH: 24
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: primer
US-09-018-125-5
Query Match 5.3%; Score 24; DB 1; Length 24;
Best Local Similarity 100.0%; Pred. No. 41;
Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 423 CGTGCAACCCAGGACTCGGCTCACA 446
Db 24 CGTGCAACCCAGGACTCGGCTCACA 1

RESULT 35
US-10-714-195-345/c
; Sequence 345, Application US/10714195
; Publication No. US20050019785A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Joffre
; APPLICANT: Cronin, Maureen
; APPLICANT: Shak, Steve
; APPLICANT: Baselga, Jose
; TITLE OF INVENTION: GENE EXPRESSION PROFILING OF EGFR
; FILE REFERENCE: 39740-0005
; CURRENT APPLICATION NUMBER: US/10/714,195
; CURRENT FILING DATE: 2003-11-14
; PRIOR APPLICATION NUMBER: 60/427090
; PRIOR FILING DATE: 2003-11-15
; NUMBER OF SEQ ID NOS: 372
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 345
; LENGTH: 23
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: primer
US-10-714-195-345
Query Match 5.1%; Score 23; DB 1; Length 23;
Best Local Similarity 100.0%; Pred. No. 48;
Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 404 GATTCCTGAGCTGTGGACGTG 426
Db 23 GATTCCTGAGCTGTGGACGTG 1
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```
RESULT 36
US-10-923-330-510
; Sequence 510, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBH02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; PRIOR FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 510
; LENGTH: 23
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA sense r
US-10-923-330-510

Query Match          5.1%; Score 23; DB 1; Length 23;
Best Local Similarity 82.6%; Pred. No. 48;
Matches 19; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

QY      2 GGTTCGGAGGGTGGCGCTCGGA 24
Db      1 GGUUGCGAGGGUGGCGCCUGGA 23

RESULT 37
US-10-923-330-511
; Sequence 511, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBH02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; PRIOR FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
```

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; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 511
; LENGTH: 23
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA sense r
US-10-923-330-511

Query Match          5.1%; Score 23; DB 1; Length 23;
Best Local Similarity 73.9%; Pred. No. 48;
Matches 17; Conservative 6; Mismatches 0; Indels 0; Gaps 0;

QY      136 GCCTCGCGCTTCCACCGTTTCAT 158
Db      1 GCGUGCGCCUCCACCGUUCAU 23

RESULT 38
US-10-923-330-512
; Sequence 512, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBH02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 512
; LENGTH: 23
; TYPE: RNA
```



```
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA sense x
US-10-923-330-512

Query Match          5.1%; Score 23; DB 1; Length 23;
Best Local Similarity 95.7%; Pred. No. 48;
Matches 22; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 283 GCACCCACTGCACCGCAAGAG 305
      |||||:|||||:|||||
Db 1 GCACCCACUGCCACCGCAAGAG 23

RESULT 39
US-10-923-330-513
; Sequence 513, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; PRIOR FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: Patentin version 3.3
; SEQ ID NO 513
; LENGTH: 23
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA sense x
US-10-923-330-515

Query Match          5.1%; Score 23; DB 1; Length 23;
Best Local Similarity 82.6%; Pred. No. 48;
Matches 19; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

Qy 395 GCGCGGCGCGATTCCTGAGCTG 417
      |||||:|||||:|||||
Db 1 GCGCGGCGCAUCCUGAGCUG 23

RESULT 40
US-10-923-330-515
; Sequence 515, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
```

```
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; PRIOR FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: Patentin version 3.3
; SEQ ID NO 515
; LENGTH: 23
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA sense x
US-10-923-330-515

Query Match          5.1%; Score 23; DB 1; Length 23;
Best Local Similarity 69.6%; Pred. No. 48;
Matches 16; Conservative 7; Mismatches 0; Indels 0; Gaps 0;

Qy 143 GCCTTCACCGTTCATCTAGAG 165
      |||:|||||:|:|:|
Db 1 GCCUCCACGCUCAUUCUAGAG 23

RESULT 41
US-10-923-330-516
; Sequence 516, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; PRIOR FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
```

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; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; PRIOR FILING DATE: 2003-02-20
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 516
; LENGTH: 23
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA sense
US-10-923-330-516

Query Match          5.1%; Score 23; DB 1; Length 23;
Best Local Similarity 69.6%; Pred. No. 48;
Matches 16; Conservative 7; Mismatches 0; Indels 0; Gaps 0;

Qy      144  CTTCCACCGTTCATTCTAGAGC 166
Db      1    CCUCCACCGUUCUUCUAGAGC 23

RESULT 42
US-10-923-330-517
; Sequence 517, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 517
; LENGTH: 23
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA sense
US-10-923-330-517

Query Match          5.1%; Score 23; DB 1; Length 23;
Best Local Similarity 69.6%; Pred. No. 48;
```

```
Matches 16; Conservative 7; Mismatches 0; Indels 0; Gaps 0;

Qy      145  CTTCCACCGTTCATTCTAGAGCA 167
Db      1    CUUCCACCGUUCUUCUAGAGCA 23

RESULT 43
US-10-923-330-518
; Sequence 518, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 518
; LENGTH: 23
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA sense
US-10-923-330-518

Query Match          5.1%; Score 23; DB 1; Length 23;
Best Local Similarity 69.6%; Pred. No. 48;
Matches 16; Conservative 7; Mismatches 0; Indels 0; Gaps 0;

Qy      146  TTCACCGTTCATTCTAGAGCAA 168
Db      1    UUCACCGUUCUUCUAGAGCAA 23

RESULT 44
US-10-923-330-519
; Sequence 519, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
```

; PRIOR APPLICATION NUMBER: PCT/US03/04088  
; PRIOR FILING DATE: 2004-05-24  
; PRIOR APPLICATION NUMBER: US 60/396,600  
; PRIOR FILING DATE: 2002-07-17  
; PRIOR APPLICATION NUMBER: PCT/US04/16390  
; PRIOR FILING DATE: 2004-05-24  
; PRIOR APPLICATION NUMBER: US 10/826,966  
; PRIOR FILING DATE: 2004-04-16  
; PRIOR APPLICATION NUMBER: US 10/757,803  
; PRIOR FILING DATE: 2004-01-14  
; PRIOR APPLICATION NUMBER: US 10/720,448  
; PRIOR FILING DATE: 2003-11-24  
; PRIOR APPLICATION NUMBER: US 10/693,059  
; PRIOR FILING DATE: 2003-11-23  
; PRIOR APPLICATION NUMBER: US 10/444,853  
; PRIOR FILING DATE: 2003-05-23  
; PRIOR APPLICATION NUMBER: PCT/US03/05346  
; PRIOR FILING DATE: 2003-02-20  
; PRIOR APPLICATION NUMBER: PCT/US03/05028  
; PRIOR FILING DATE: 2003-02-20  
; Remaining Prior Application data removed - See File Wrapper or PALM.  
; NUMBER OF SEQ ID NOS: 768  
; SOFTWARE: PatentIn version 3.3  
; SEQ ID NO 519  
; LENGTH: 23  
; TYPE: RNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA sense r

US-10-923-330-519

Query Match 5.1%; Score 23; DB 1; Length 23;  
Best Local Similarity 73.9%; Pred.No. 48;  
Matches 17; Conservative 6; Mismatches 0; Indels 0; Gaps 0;

Qy 147 TCACCGTTTCATTCTAGAGCAA 169  
Db 1 UCCACCGUUCUUCUAGAGCAA 23

RESULT 45  
US-10-923-330-520  
; Sequence 520, Application US/10923330  
; Publication No. US20050153916A1  
; GENERAL INFORMATION:  
; APPLICANT: McSwiggen, James  
; APPLICANT: Beigelman, Leonid  
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene  
; FILE REFERENCE: 400/209 (MBHB02-708-C)  
; CURRENT APPLICATION NUMBER: US/10/923,330  
; PRIOR FILING DATE: 2004-08-20  
; PRIOR APPLICATION NUMBER: PCT/US03/04088  
; PRIOR FILING DATE: 2004-05-24  
; PRIOR APPLICATION NUMBER: US 60/396,600  
; PRIOR FILING DATE: 2002-07-17  
; PRIOR APPLICATION NUMBER: PCT/US04/16390  
; PRIOR FILING DATE: 2004-05-24  
; PRIOR APPLICATION NUMBER: US 10/826,966  
; PRIOR FILING DATE: 2004-04-16  
; PRIOR APPLICATION NUMBER: US 10/757,803  
; PRIOR FILING DATE: 2004-01-14  
; PRIOR APPLICATION NUMBER: US 10/720,448  
; PRIOR FILING DATE: 2003-11-24  
; PRIOR APPLICATION NUMBER: US 10/693,059  
; PRIOR FILING DATE: 2003-11-23  
; PRIOR APPLICATION NUMBER: PCT/US03/05346  
; PRIOR FILING DATE: 2003-05-23  
; PRIOR APPLICATION NUMBER: PCT/US03/05028  
; PRIOR FILING DATE: 2003-02-20  
; PRIOR APPLICATION NUMBER: PCT/US03/05028  
; PRIOR FILING DATE: 2003-02-20

; Remaining Prior Application data removed - See File Wrapper or PALM.  
; NUMBER OF SEQ ID NOS: 768  
; SOFTWARE: PatentIn version 3.3  
; SEQ ID NO 520  
; LENGTH: 23  
; TYPE: RNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA sense r

US-10-923-330-520

Query Match 5.1%; Score 23; DB 1; Length 23;  
Best Local Similarity 78.3%; Pred.No. 48;  
Matches 18; Conservative 5; Mismatches 0; Indels 0; Gaps 0;

Qy 148 CCACCGTTTCATTCTAGAGCAAAC 170  
Db 1 CCACCGUUCUUCUAGAGCAAAC 23

## RESULT 46

US-10-923-330-521  
; Sequence 521, Application US/10923330  
; Publication No. US20050153916A1  
; GENERAL INFORMATION:  
; APPLICANT: McSwiggen, James  
; APPLICANT: Beigelman, Leonid  
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene  
; FILE REFERENCE: 400/209 (MBHB02-708-C)  
; CURRENT APPLICATION NUMBER: US/10/923,330  
; PRIOR FILING DATE: 2004-08-20  
; PRIOR APPLICATION NUMBER: PCT/US03/04088  
; PRIOR FILING DATE: 2004-05-24  
; PRIOR APPLICATION NUMBER: US 60/396,600  
; PRIOR FILING DATE: 2002-07-17  
; PRIOR APPLICATION NUMBER: PCT/US04/16390  
; PRIOR FILING DATE: 2004-05-24  
; PRIOR APPLICATION NUMBER: US 10/826,966  
; PRIOR FILING DATE: 2004-04-16  
; PRIOR APPLICATION NUMBER: US 10/757,803  
; PRIOR FILING DATE: 2004-01-14  
; PRIOR APPLICATION NUMBER: US 10/720,448  
; PRIOR FILING DATE: 2003-11-24  
; PRIOR APPLICATION NUMBER: US 10/693,059  
; PRIOR FILING DATE: 2003-11-23  
; PRIOR APPLICATION NUMBER: US 10/444,853  
; PRIOR FILING DATE: 2003-05-23  
; PRIOR APPLICATION NUMBER: PCT/US03/05346  
; PRIOR FILING DATE: 2003-02-20  
; PRIOR APPLICATION NUMBER: PCT/US03/05028  
; Remaining Prior Application data removed - See File Wrapper or PALM.  
; NUMBER OF SEQ ID NOS: 768  
; SOFTWARE: PatentIn version 3.3  
; SEQ ID NO 521  
; LENGTH: 23  
; TYPE: RNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA sense r

US-10-923-330-521

Query Match 5.1%; Score 23; DB 1; Length 23;  
Best Local Similarity 78.3%; Pred.No. 48;  
Matches 18; Conservative 5; Mismatches 0; Indels 0; Gaps 0;

Qy 298 GCGAAGAGTTGGGCTCTGTGACG 320  
Db 1 GCGAAGAGUUGGCGUCUGACG 23

RESULT 47  
US-09-057-351-41/c  
; Sequence 41, Application US/09057351  
; Patent No. US20010034439A1  
; GENERAL INFORMATION:  
; APPLICANT: Villeponteau, Bryant  
; APPLICANT: Feng, Junli  
; APPLICANT: Funk, Walter  
; APPLICANT: Andrews, William H.  
; TITLE OF INVENTION: Mammalian Telomerase  
; NUMBER OF SEQUENCES: 42  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Townsend and Townsend and Crew LLP  
; STREET: Two Embarcadero Center, Eighth Floor  
; CITY: San Francisco  
; STATE: California  
; COUNTRY: USA  
; ZIP: 94111-3834  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/09/057,351  
; FILING DATE: 08-APR-1994  
; CLASSIFICATION: 435  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/272,102  
; FILING DATE: 07-JUL-1994  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/330,123  
; FILING DATE: 27-OCT-1994  
; APPLICATION NUMBER: US 08/472,802  
; FILING DATE: 07-JUN-1995  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Storella, John R.  
; REGISTRATION NUMBER: 32,944  
; REFERENCE/DOCKET NUMBER: 015389-000821US  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (415) 576-0200  
; INFORMATION FOR SEQ ID NO: 41:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 22 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: RNA  
US-09-057-351-41

Query Match 4.9%; Score 22; DB 1; Length 22;  
Best Local Similarity 100.0%; Pred. No. 55;  
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 46 CTAACCCCTAAGGAGGCG 67  
Db 22 CTAACCCCTAAGGAGGCG 1

RESULT 48  
US-09-057-351-42/c  
; Sequence 42, Application US/09057351  
; Patent No. US20010034439A1  
; GENERAL INFORMATION:  
; APPLICANT: Villeponteau, Bryant  
; APPLICANT: Feng, Junli  
; APPLICANT: Funk, Walter  
; APPLICANT: Andrews, William H.  
; TITLE OF INVENTION: Mammalian Telomerase  
; NUMBER OF SEQUENCES: 42  
; CORRESPONDENCE ADDRESS:

; ADDRESSEE: Townsend and Townsend and Crew LLP  
; STREET: Two Embarcadero Center, Eighth Floor  
; CITY: San Francisco  
; STATE: California  
; COUNTRY: USA  
; ZIP: 94111-3834  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/09/057,351  
; FILING DATE: 08-APR-1994  
; CLASSIFICATION: 435  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/272,102  
; FILING DATE: 07-JUL-1994  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/330,123  
; FILING DATE: 27-OCT-1994  
; APPLICATION NUMBER: US 08/472,802  
; FILING DATE: 07-JUN-1995  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Storella, John R.  
; REGISTRATION NUMBER: 32,944  
; REFERENCE/DOCKET NUMBER: 015389-000821US  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (415) 576-0200  
; INFORMATION FOR SEQ ID NO: 42:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 22 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: RNA  
US-09-057-351-42

Query Match 4.9%; Score 22; DB 1; Length 22;  
Best Local Similarity 100.0%; Pred. No. 55;  
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 54 AACTGAGAGGCGTAGGCGCC 75  
Db 22 AACTGAGAGGCGTAGGCGCC 1

RESULT 49  
US-10-359-935-41/c  
; Sequence 41, Application US/10359935  
; Publication No. US20030153076A1  
; GENERAL INFORMATION:  
; APPLICANT: Villeponteau, Bryant  
; APPLICANT: Feng, Junli  
; APPLICANT: Funk, Walter  
; APPLICANT: Andrews, William H.  
; TITLE OF INVENTION: Mammalian Telomerase  
; NUMBER OF SEQUENCES: 42  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Townsend and Townsend and Crew LLP  
; STREET: Two Embarcadero Center, Eighth Floor  
; CITY: San Francisco  
; STATE: California  
; COUNTRY: USA  
; ZIP: 94111-3834  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/10/359,935  
; FILING DATE: 07-Feb-2003  
; CLASSIFICATION: 435  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US/09/057,351  
; FILING DATE: 08-APR-1994  
; APPLICATION NUMBER: US 08/272,102  
; FILING DATE: 07-JUL-1994  
; APPLICATION NUMBER: US 08/330,123  
; FILING DATE: 27-OCT-1994  
; APPLICATION NUMBER: US 08/472,802  
; FILING DATE: 07-JUN-1995  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Storella, John R.  
; REGISTRATION NUMBER: 32,944  
; REFERENCE/DOCKET NUMBER: 015389-000821US  
; TELEPHONE: (415) 576-0200  
; TELEFAX: (415) 576-0300  
; INFORMATION FOR SEQ ID NO: 41:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 22 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: RNA  
; SEQUENCE DESCRIPTION: SEQ ID NO: 41:  
US-10-359-935-41  
  
Query Match 4.9%; Score 22; DB 1; Length 22;  
Best Local Similarity 100.0%; Pred. No. 55;  
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
  
QY 46 CTAACCCCTAACTGAGAGGGCG 67  
|||||  
Db 22 CTAACCCCTAACTGAGAGGGCG 1  
  
RESULT 50  
US-10-359-935-42/c  
; Sequence 42, Application US/10359935  
; Publication No. US20030153076A1  
; GENERAL INFORMATION:  
; APPLICANT: Villetteponteau, Bryant  
; Funk, Junli  
; Andrews, William H.  
; TITLE OF INVENTION: Mammalian Telomerase  
; NUMBER OF SEQUENCES: 42  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Townsend and Townsend and Crew LLP  
; STREET: Two Embarcadero Center, Eighth Floor  
; CITY: San Francisco  
; STATE: California  
; COUNTRY: USA  
; ZIP: 94111-3834  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/10/359,935  
; FILING DATE: 07-Feb-2003  
; CLASSIFICATION: 435  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US/09/057,351  
; FILING DATE: 08-APR-1994  
; APPLICATION NUMBER: US 08/272,102  
; FILING DATE: 07-JUL-1994  
; APPLICATION NUMBER: US 08/330,123  
; FILING DATE: 27-OCT-1994  
; APPLICATION NUMBER: US 08/472,802

; FILING DATE: 07-JUN-1995  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Storella, John R.  
; REGISTRATION NUMBER: 32,944  
; REFERENCE/DOCKET NUMBER: 015389-000821US  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (415) 576-0200  
; TELEFAX: (415) 576-0300  
; INFORMATION FOR SEQ ID NO: 42:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 22 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: RNA  
; SEQUENCE DESCRIPTION: SEQ ID NO: 42:  
US-10-359-935-42  
  
Query Match 4.9%; Score 22; DB 1; Length 22;  
Best Local Similarity 100.0%; Pred. No. 55;  
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
  
QY 54 AACTGAGAGGGCGGTAGGCGCC 75  
|||||  
Db 22 AACTGAGAGGGCGGTAGGCGCC 1  
  
RESULT 51  
US-10-330-872-2/c  
; Sequence 2, Application US/10330872  
; Publication No. US20030186282A1  
; GENERAL INFORMATION:  
; APPLICANT: Geron Corporation  
; APPLICANT: Weinrich, Scott  
; APPLICANT: Atkinson III, Edward  
; APPLICANT: Lichtsteiner, Serge  
; APPLICANT: Vasserot, Alain  
; APPLICANT: Pruzan, Ronald  
; TITLE OF INVENTION: Using Purified Telomerase to Identify Telomerase Activators and  
; FILE OF INVENTION: Inhibitors  
; FILE REFERENCE: 011/006C  
; CURRENT APPLICATION NUMBER: US/10/330,872  
; CURRENT FILING DATE: 2002-12-24  
; PRIOR APPLICATION NUMBER: 08/510,736  
; PRIOR FILING DATE: 1995-08-04  
; PRIOR APPLICATION NUMBER: 08/833,377  
; PRIOR FILING DATE: 1997-04-04  
; PRIOR APPLICATION NUMBER: 09/420,056  
; PRIOR FILING DATE: 1999-10-18  
; PRIOR APPLICATION NUMBER: 09/717,828  
; PRIOR FILING DATE: 2000-11-20  
; NUMBER OF SEQ ID NOS: 11  
; SOFTWARE: PatentIn version 3.1  
; SEQ ID NO 2  
; LENGTH: 22  
; TYPE: DNA  
; ORGANISM: Homo sapiens  
US-10-330-872-2  
  
Query Match 4.9%; Score 22; DB 1; Length 22;  
Best Local Similarity 100.0%; Pred. No. 55;  
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
  
QY 46 CTAACCCCTAACTGAGAGGGCG 67  
|||||  
Db 22 CTAACCCCTAACTGAGAGGGCG 1  
  
RESULT 52  
US-10-931-266-12  
; Sequence 12, Application US/10831266  
; Publication No. US20050003404A1  
; GENERAL INFORMATION:

; APPLICANT: Rowley, Peter T.  
; TITLE OF INVENTION: TELOMERASE INTERFERENCE  
; FILE REFERENCE: A-71506-1/RFT/THR  
; CURRENT APPLICATION NUMBER: US/10/831,266  
; CURRENT FILING DATE: 2004-04-22  
; PRIOR APPLICATION NUMBER: PCT/US 02/33065  
; PRIOR FILING DATE: 2002-10-16  
; PRIOR APPLICATION NUMBER: US 60/345,326  
; PRIOR FILING DATE: 2001-10-22  
; PRIOR APPLICATION NUMBER: US 60/359,196  
; PRIOR FILING DATE: 2002-02-20  
; PRIOR APPLICATION NUMBER: US 60/383,195  
; PRIOR FILING DATE: 2002-05-22  
; NUMBER OF SEQ ID NOS: 17  
; SOFTWARE: PatentIn version 3.2  
; SEQ ID NO 12  
; LENGTH: 22  
; TYPE: DNA  
; ORGANISM: Artificial  
; FEATURE:  
; OTHER INFORMATION: primer  
US-10-831-266-12

Query Match 4.9%; Score 22; DB 1; Length 22;  
Best Local Similarity 100.0%; Pred. No. 55;  
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 19 CTGGAGGGGTGGTGCCATT 40  
|||||  
Db 1 CTGGAGGGGTGGTGCCATT 22

## RESULT 53

US-10-831-266-13/c  
; Sequence 13, Application US/10831266  
; Publication No. US2005003404A1  
; GENERAL INFORMATION:  
; APPLICANT: Rowley, Peter T.  
; TITLE OF INVENTION: TELOMERASE INTERFERENCE  
; FILE REFERENCE: A-71506-1/RFT/THR  
; CURRENT APPLICATION NUMBER: US/10/831,266  
; CURRENT FILING DATE: 2004-04-22  
; PRIOR APPLICATION NUMBER: PCT/US 02/33065  
; PRIOR FILING DATE: 2002-10-16  
; PRIOR APPLICATION NUMBER: US 60/345,326  
; PRIOR FILING DATE: 2001-10-22  
; PRIOR APPLICATION NUMBER: US 60/359,196  
; PRIOR FILING DATE: 2002-02-20  
; PRIOR APPLICATION NUMBER: US 60/383,195  
; PRIOR FILING DATE: 2002-05-22  
; NUMBER OF SEQ ID NOS: 17  
; SOFTWARE: PatentIn version 3.2  
; SEQ ID NO 13  
; LENGTH: 22  
; TYPE: DNA  
; ORGANISM: Artificial  
; FEATURE:  
; OTHER INFORMATION: primer  
US-10-831-266-13

Query Match 4.9%; Score 22; DB 1; Length 22;  
Best Local Similarity 100.0%; Pred. No. 55;  
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 176 ATGTCAGCTGCTGCCCGTTTCG 197  
|||||  
Db 22 ATGTCAGCTGCTGCCCGTTTCG 1

## RESULT 54

US-10-831-267-12  
; Sequence 12, Application US/10831267  
; Publication No. US20050009177A1

; GENERAL INFORMATION:  
; APPLICANT: Rowley, Peter T.  
; TITLE OF INVENTION: TELOMERASE INTERFERENCE  
; FILE REFERENCE: A-71506-2/RFT/THR  
; CURRENT APPLICATION NUMBER: US/10/831,267  
; CURRENT FILING DATE: 2004-04-22  
; PRIOR APPLICATION NUMBER: PCT/US 02/33146  
; PRIOR FILING DATE: 2002-10-16  
; PRIOR APPLICATION NUMBER: US 60/345,326  
; PRIOR FILING DATE: 2001-10-22  
; PRIOR APPLICATION NUMBER: US 60/359,196  
; PRIOR FILING DATE: 2002-02-20  
; PRIOR APPLICATION NUMBER: US 60/383,195  
; PRIOR FILING DATE: 2002-05-22  
; NUMBER OF SEQ ID NOS: 23  
; SOFTWARE: PatentIn version 3.2  
; SEQ ID NO 12  
; LENGTH: 22  
; TYPE: DNA  
; ORGANISM: Artificial  
; FEATURE:  
; OTHER INFORMATION: primer  
US-10-831-267-12

Query Match 4.9%; Score 22; DB 1; Length 22;  
Best Local Similarity 100.0%; Pred. No. 55;  
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 19 CTGGAGGGGTGGTGCCATT 40  
|||||  
Db 1 CTGGAGGGGTGGTGCCATT 22

## RESULT 55

US-10-831-267-13/c  
; Sequence 13, Application US/10831267  
; Publication No. US20050009177A1  
; GENERAL INFORMATION:  
; APPLICANT: Rowley, Peter T.  
; TITLE OF INVENTION: TELOMERASE INTERFERENCE  
; FILE REFERENCE: A-71506-2/RFT/THR  
; CURRENT APPLICATION NUMBER: US/10/831,267  
; CURRENT FILING DATE: 2004-04-22  
; PRIOR APPLICATION NUMBER: PCT/US 02/33146  
; PRIOR FILING DATE: 2002-10-16  
; PRIOR APPLICATION NUMBER: US 60/345,326  
; PRIOR FILING DATE: 2001-10-22  
; PRIOR APPLICATION NUMBER: US 60/359,196  
; PRIOR FILING DATE: 2002-02-20  
; PRIOR APPLICATION NUMBER: US 60/383,195  
; NUMBER OF SEQ ID NOS: 23  
; SOFTWARE: PatentIn version 3.2  
; SEQ ID NO 13  
; LENGTH: 22  
; TYPE: DNA  
; ORGANISM: Artificial  
; FEATURE:  
; OTHER INFORMATION: primer  
US-10-831-267-13

Query Match 4.9%; Score 22; DB 1; Length 22;  
Best Local Similarity 100.0%; Pred. No. 55;  
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 176 ATGTCAGCTGCTGCCCGTTTCG 197  
|||||  
Db 22 ATGTCAGCTGCTGCCCGTTTCG 1

## RESULT 56

US-10-811-033-2/c  
; Sequence 2, Application US/10811033

```
; Publication No. US2005008983A1
; GENERAL INFORMATION:
; APPLICANT: Geron Corporation
; APPLICANT: Weinrich, Scott
; APPLICANT: Atkinson III, Edward
; APPLICANT: Lichtesteiner, Serge
; APPLICANT: Vasserot, Alain
; APPLICANT: Pruzan, Ronald
; TITLE OF INVENTION: Using Purified Telomerase to Identify Telomerase Activators and
; FILE REFERENCE: 011/006C
; CURRENT APPLICATION NUMBER: US/10/811,033
; CURRENT FILING DATE: 2004-03-26
; PRIOR APPLICATION NUMBER: US/10/330,872A
; PRIOR FILING DATE: 2002-12-24
; PRIOR APPLICATION NUMBER: 08/510,736
; PRIOR FILING DATE: 1995-08-04
; PRIOR APPLICATION NUMBER: 08/833,377
; PRIOR FILING DATE: 1997-04-04
; PRIOR APPLICATION NUMBER: 09/420,056
; PRIOR FILING DATE: 1999-10-18
; PRIOR APPLICATION NUMBER: 09/717,828
; PRIOR FILING DATE: 2000-11-20
; NUMBER OF SEQ ID NOS: 11
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 2
; LENGTH: 22
; TYPE: DNA
; ORGANISM: Homo sapiens
; US-10-811-033-2

Query Match 4.9%; Score 22; DB 1; Length 22;
Best Local Similarity 100.0%; Pred. No. 55;
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 46 CTAACCCCTAACTGAGAAGGCG 67
Db 22 CTAACCCCTAACTGAGAAGGCG 1

RESULT 57
US-09-057-351-25/c
; Sequence 25, Application US/09057351
; Patent No. US20010034439A1
; GENERAL INFORMATION:
; APPLICANT: Villeponteau, Bryant
; APPLICANT: Feng, Junli
; APPLICANT: Funk, Walter
; APPLICANT: Andrews, William H.
; TITLE OF INVENTION: Mammalian Telomerase
; NUMBER OF SEQUENCES: 42
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/057,351
; FILING DATE: 08-APR-1994
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/272,102
; FILING DATE: 07-JUL-1994
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US 08/272,102
; FILING DATE: 07-JUL-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/330,123
; FILING DATE: 27-OCT-1994
```

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; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/472,802
; FILING DATE: 07-JUN-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-000821US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 25:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 21 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
; US-09-057-351-25

Query Match 4.7%; Score 21; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 64;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 184 TGCTGGCCGTTGCGCCCTCC 204
Db 21 TGCTGGCCGTTGCGCCCTCC 1

RESULT 58
US-10-359-935-25/c
; Sequence 25, Application US/10359935
; Publication No. US20030153076A1
; GENERAL INFORMATION:
; APPLICANT: Villeponteau, Bryant
; APPLICANT: Feng, Junli
; APPLICANT: Funk, Walter
; APPLICANT: Andrews, William H.
; TITLE OF INVENTION: Mammalian Telomerase
; NUMBER OF SEQUENCES: 42
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/10/359,935
; FILING DATE: 07-Feb-2003
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/09/057,351
; FILING DATE: 08-APR-1994
; APPLICATION NUMBER: US 08/272,102
; FILING DATE: 07-JUL-1994
; APPLICATION NUMBER: US 08/330,123
; FILING DATE: 27-OCT-1994
; APPLICATION NUMBER: US 08/472,802
; FILING DATE: 07-JUN-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-000821US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 25:
; SEQUENCE CHARACTERISTICS:
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;
; LENGTH: 21 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
; SEQUENCE DESCRIPTION: SEQ ID NO: 25:
US-10-359-935-25

Query Match          4.7%; Score 21; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 64;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 184 TCTGCGCGGTTCCGCGCCCTCC 204
DB 21 TCTGCGCGGTTCCGCGCCCTCC 1

RESULT 59
US-10-923-330-536
; Sequence 536, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MEHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; PRIOR FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR FILING DATE: 2002-07-17
; PRIOR FILING DATE: 2004-05-24
; PRIOR FILING DATE: 2004-05-24
; PRIOR FILING DATE: 2004-04-16
; PRIOR FILING DATE: 2004-04-16
; PRIOR FILING DATE: 2004-01-14
; PRIOR FILING DATE: 2004-01-14
; PRIOR FILING DATE: 2003-11-24
; PRIOR FILING DATE: 2003-11-23
; PRIOR FILING DATE: 2003-11-23
; PRIOR FILING DATE: 2003-05-23
; PRIOR FILING DATE: 2003-05-23
; PRIOR FILING DATE: 2003-02-20
; PRIOR FILING DATE: 2003-02-20
; PRIOR FILING DATE: 2003-02-20
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 537
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA sense region
US-10-923-330-537

Query Match          4.7%; Score 21; DB 1; Length 21;
Best Local Similarity 71.4%; Pred. No. 64;
Matches 15; Conservative 6; Mismatches 0; Indels 0; Gaps 0;

QY 138 CTGCGCGCTTCCACCGTTTCAT 158
DB 1 CUGCGCGCUUCCACCGUUCAU 21

RESULT 61
US-10-923-330-538
; Sequence 538, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MEHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; PRIOR FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR FILING DATE: 2002-07-17
; PRIOR FILING DATE: 2002-07-17
; PRIOR FILING DATE: 2004-05-24
; PRIOR FILING DATE: 2004-05-24
; PRIOR FILING DATE: 2004-04-16
; PRIOR FILING DATE: 2004-04-16
; PRIOR FILING DATE: 2004-01-14
; PRIOR FILING DATE: 2004-01-14
; PRIOR FILING DATE: 2003-11-24
; PRIOR FILING DATE: 2003-11-23
; PRIOR FILING DATE: 2003-11-23
; PRIOR FILING DATE: 2003-05-23
; PRIOR FILING DATE: 2003-05-23
; PRIOR FILING DATE: 2003-02-20
; PRIOR FILING DATE: 2003-02-20
; PRIOR FILING DATE: 2003-02-20
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 536
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA sense region
US-10-923-330-538

Query Match          4.7%; Score 21; DB 1; Length 21;
Best Local Similarity 81.0%; Pred. No. 64;
Matches 17; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

QY 4 TTGCGGAGGTTGGCGCTGGGA 24
DB 1 UTGCGGAGGUGGCGGUGGA 21

RESULT 60
US-10-923-330-537
; Sequence 537, Application US/10923330

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; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; PRIOR FILING DATE: 2003-02-20
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: Patentin version 3.3
; SEQ ID NO 538
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA sense region
; US-10-923-330-538

Query Match          4.7%; Score 21; DB 1; Length 21;
Best Local Similarity 95.2%; Pred. No. 64;
Matches 20; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY      285 ACCCACTGCCACCGCGAAGAG 305
Db      1 ACCCACUGCCACCGCGAAGAG 21
          |||||:|||||:|||||:|||||:
          |||||:|||||:|||||:|||||:

RESULT 62
US-10-923-330-539
; Sequence 539, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; PRIOR FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; PRIOR FILING DATE: 2003-02-20
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: Patentin version 3.3
; SEQ ID NO 541
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
; US-10-923-330-541

Query Match          4.7%; Score 21; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 64;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      2 GGTTCGGAGGGTGGCGCTGG 22
Db      21 GGTTCGGAGGGTGGCGCTGG 1
          |||||:|||||:|||||:|||||:
          |||||:|||||:|||||:|||||:

RESULT 64
US-10-923-330-542/c
; Sequence 542, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; PRIOR FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; PRIOR FILING DATE: 2003-02-20
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: Patentin version 3.3
; SEQ ID NO 539
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA sense region
; US-10-923-330-539
```

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; FILE REFERENCE: 400/209 (MBHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; PRIOR FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; REMAINING PRIOR APPLICATION DATA REMOVED - See File Wrapper or PALM.
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; REMAINING PRIOR APPLICATION DATA REMOVED - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 542
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
US-10-923-330-542

Query Match          4.7%; Score 21; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 64;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 136 GCCTGCCGCTTCACCGTTC 156
Db 21 GCCTGCCGCTTCACCGTTC 1

RESULT 65
US-10-923-330-543/c
; Sequence 543, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; REMAINING PRIOR APPLICATION DATA REMOVED - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 542
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
US-10-923-330-543
```

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; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; PRIOR FILING DATE: 2003-02-20
; REMAINING PRIOR APPLICATION DATA REMOVED - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 543
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
US-10-923-330-543

Query Match          4.7%; Score 21; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 64;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 283 GCACCCACTGCCACCGCGAAG 303
Db 21 GCACCCACTGCCACCGCGAAG 1

RESULT 66
US-10-923-330-544/c
; Sequence 544, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; REMAINING PRIOR APPLICATION DATA REMOVED - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 544
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
US-10-923-330-544

Query Match          4.7%; Score 21; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 64;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 395 GCGCGCGCGATTCCCTGAGC 415
```

Db 21 GCGGCGGCGGATTCCTGAGC 1

RESULT 67

US-09-057-351-7/c

Sequence 7, Application US/09057351

Patent No. US20010034439A1

GENERAL INFORMATION:

APPLICANT: Villeponteau, Bryant

APPLICANT: Feng, Junli

APPLICANT: Andrews, William H.

TITLE OF INVENTION: Mammalian Telomerase

NUMBER OF SEQUENCES: 42

CORRESPONDENCE ADDRESS:

ADDRESSEE: Townsend and Townsend and Crew LLP

STREET: Two Embarcadero Center, Eighth Floor

CITY: San Francisco

STATE: California

COUNTRY: USA

ZIP: 94111-3834

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Release #1.0, Version #1.30

APPLICATION DATA:

APPLICATION NUMBER: US/09/057,351

FILING DATE: 08-APR-1994

CLASSIFICATION: 435

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 08/272,102

FILING DATE: 07-JUL-1994

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 08/330,123

FILING DATE: 27-OCT-1994

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 08/472,802

FILING DATE: 07-JUN-1995

ATTORNEY/AGENT INFORMATION:

NAME: Storella, John R.

REGISTRATION NUMBER: 32,944

REFERENCE/DOCKET NUMBER: 015389-000821US

TELECOMMUNICATION INFORMATION:

TELEPHONE: (415) 576-0200

TELEFAX: (415) 576-0300

INFORMATION FOR SEQ ID NO: 7:

SEQUENCE CHARACTERISTICS:

LENGTH: 20 base pairs

TYPE: nucleic acid

STRANDEDNESS: single

TOPOLOGY: linear

MOLECULE TYPE: DNA

US-09-057-351-7

Query Match 4.4%; Score 20; DB 1; Length 20;

Best Local Similarity 100.0%; Pred. No. 73;

Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2 GGTTCGCGAGGTCGCGCTG 21

Db 20 GGTTCGCGAGGTCGCGCTG 1

RESULT 68

US-09-057-351-40/c

Sequence 40, Application US/09057351

Patent No. US20010034439A1

GENERAL INFORMATION:

APPLICANT: Villeponteau, Bryant

APPLICANT: Feng, Junli

APPLICANT: Funk, Walter

APPLICANT: Andrews, William H.

TITLE OF INVENTION: Mammalian Telomerase

NUMBER OF SEQUENCES: 42

CORRESPONDENCE ADDRESS:

ADDRESSEE: Townsend and Townsend and Crew LLP

STREET: Two Embarcadero Center, Eighth Floor

CITY: San Francisco

STATE: California

COUNTRY: USA

ZIP: 94111-3834

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Release #1.0, Version #1.30

APPLICATION DATA:

APPLICATION NUMBER: US/09/057,351

FILING DATE: 08-APR-1994

CLASSIFICATION: 435

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 08/272,102

FILING DATE: 07-JUL-1994

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 08/330,123

FILING DATE: 27-OCT-1994

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 08/472,802

FILING DATE: 07-JUN-1995

ATTORNEY/AGENT INFORMATION:

NAME: Storella, John R.

REGISTRATION NUMBER: 32,944

REFERENCE/DOCKET NUMBER: 015389-000821US

TELECOMMUNICATION INFORMATION:

TELEPHONE: (415) 576-0200

TELEFAX: (415) 576-0300

INFORMATION FOR SEQ ID NO: 40:

SEQUENCE CHARACTERISTICS:

LENGTH: 20 base pairs

TYPE: nucleic acid

STRANDEDNESS: single

TOPOLOGY: linear

MOLECULE TYPE: RNA

US-09-057-351-40

Query Match 4.4%; Score 20; DB 1; Length 20;

Best Local Similarity 100.0%; Pred. No. 73;

Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 41 TTGTGCTAACCTTAACCTGAG 60

Db 20 TTGTGCTAACCTTAACCTGAG 1

RESULT 69

US-10-359-935-7/c

Sequence 7, Application US/10359935

Publication No. US20030153076A1

GENERAL INFORMATION:

APPLICANT: Villeponteau, Bryant

APPLICANT: Feng, Junli

APPLICANT: Funk, Walter

APPLICANT: Andrews, William H.

TITLE OF INVENTION: Mammalian Telomerase

NUMBER OF SEQUENCES: 42

CORRESPONDENCE ADDRESS:

ADDRESSEE: Townsend and Townsend and Crew LLP

STREET: Two Embarcadero Center, Eighth Floor

CITY: San Francisco

STATE: California

COUNTRY: USA

ZIP: 94111-3834

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/10/359,935  
FILING DATE: 07-FEB-2003  
CLASSIFICATION: 435  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US/09/057,351  
FILING DATE: 08-APR-1994  
APPLICATION NUMBER: US 08/272,102  
FILING DATE: 07-JUL-1994  
APPLICATION NUMBER: US 08/330,123  
FILING DATE: 27-OCT-1994  
APPLICATION NUMBER: US 08/472,802  
FILING DATE: 07-JUN-1995  
ATTORNEY/AGENT INFORMATION:  
NAME: Storella, John R.  
REGISTRATION NUMBER: 32,944  
REFERENCE/DOCKET NUMBER: 015389-000821US  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (415) 576-0200  
TELEFAX: (415) 576-0300  
SEQUENCE CHARACTERISTICS:  
LENGTH: 20 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: DNA  
SEQUENCE DESCRIPTION: SEQ ID NO: 7:  
US-10-359-935-7

Query Match 4.4%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 73;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 2 GGTTCGGAGGTGGGCGTG 21  
Db 20 GGTTCGGAGGTGGGCGTG 1

RESULT 70  
US-10-359-935-40/c  
Sequence 40, Application US/10359935  
Publication No. US20030153076A1  
GENERAL INFORMATION:  
APPLICANT: Villeponteau, Bryant  
Feng, Junli  
Funk, Walter  
Andrews, William H.  
TITLE OF INVENTION: Mammalian Telomerase  
NUMBER OF SEQUENCES: 42  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Townsend and Townsend and Crew LLP  
STREET: Two Embarcadero Center, Eighth Floor  
CITY: San Francisco  
STATE: California  
COUNTRY: USA  
ZIP: 94111-3834  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/10/359,935  
FILING DATE: 07-FEB-2003  
CLASSIFICATION: 435  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US/09/057,351  
FILING DATE: 08-APR-1994  
APPLICATION NUMBER: US 08/272,102  
FILING DATE: 07-JUL-1994

APPLICATION NUMBER: US 08/330,123  
FILING DATE: 27-OCT-1994  
APPLICATION NUMBER: US 08/472,802  
FILING DATE: 07-JUN-1995  
ATTORNEY/AGENT INFORMATION:  
NAME: Storella, John R.  
REGISTRATION NUMBER: 32,944  
REFERENCE/DOCKET NUMBER: 015389-000821US  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (415) 576-0200  
TELEFAX: (415) 576-0300  
INFORMATION FOR SEQ ID NO: 40:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 20 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: RNA  
SEQUENCE DESCRIPTION: SEQ ID NO: 40:  
US-10-359-935-40

Query Match 4.4%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 73;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 41 TTTGTCTAACCTTAAGTGAG 60  
Db 20 TTTGTCTAACCTTAAGTGAG 1

RESULT 71  
US-09-018-125-2/c  
Sequence 2, Application US/09018125A  
Patent No. US20010007902A1  
GENERAL INFORMATION:  
APPLICANT: Silverman, Robert H.  
APPLICANT: Kondo, Seiji  
APPLICANT: Cowell, John K.  
APPLICANT: Li, Guivong  
APPLICANT: Torrence, Paul F.  
TITLE OF INVENTION: RNASE L ACTIVATORS AND ANTISENSE OLIGONUCLEOTIDES  
TITLE OF INVENTION: EFFECTIVE TO TREAT TELOMERASE-EXPRESSING MALIGNANCIES  
FILE REFERENCE: 8656-022  
CURRENT APPLICATION NUMBER: US/09/018,125A  
CURRENT FILING DATE: 1999-02-03  
EARLIER APPLICATION NUMBER: 60/044,507  
EARLIER FILING DATE: 1997-04-21  
NUMBER OF SEQ ID NOS: 9  
SOFTWARE: PatentIn Ver. 2.0  
SEQ ID NO 2  
LENGTH: 19  
TYPE: DNA  
ORGANISM: Artificial Sequence  
FEATURE:  
OTHER INFORMATION: Description of Artificial Sequence:  
OTHER INFORMATION: oligonucleotide  
US-09-018-125-2

Query Match 4.2%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 82;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 76 GTGCTTTTGCTCCCGCGC 94  
Db 19 GTGCTTTTGCTCCCGCGC 1

RESULT 72  
US-10-016-490C-8  
Sequence 8, Application US/10016490C  
Publication No. US2004007269A1  
GENERAL INFORMATION:  
APPLICANT: Yin, James Q.

```
; TITLE OF INVENTION: Methods for design and selection of short double-stranded
; FILE REFERENCE: 01-2793
; CURRENT APPLICATION NUMBER: US/10/016.490C
; CURRENT FILING DATE: 2002-11-22
; NUMBER OF SEQ ID NOS: 51
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 8
; LENGTH: 19
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: The same as those in human.
US-10-016-490C-8

Query Match          4.2%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 82;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 372 AGAGGAACGGAGCGAGTCC 390
    |||||
Db 1 AGAGGAACGGAGCGAGTCC 19

RESULT 73
US-10-831-267-16
; Sequence 16, Application US/10831267
; Publication No. US20050009177A1
; GENERAL INFORMATION:
; APPLICANT: Rowley, Peter T.
; TITLE OF INVENTION: TELOMERASE INTERFERENCE
; FILE REFERENCE: A-71506-2/RFT/THR
; CURRENT APPLICATION NUMBER: US/10/831.267
; CURRENT FILING DATE: 2004-04-22
; PRIOR APPLICATION NUMBER: PCT/US 02/33146
; PRIOR FILING DATE: 2002-10-16
; PRIOR APPLICATION NUMBER: US 60/345,326
; PRIOR FILING DATE: 2001-10-22
; PRIOR APPLICATION NUMBER: US 60/359,196
; PRIOR FILING DATE: 2002-02-20
; PRIOR APPLICATION NUMBER: US 60/383,195
; PRIOR FILING DATE: 2002-05-22
; NUMBER OF SEQ ID NOS: 23
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 16
; LENGTH: 19
; TYPE: RNA
; ORGANISM: Artificial
; FEATURE:
; OTHER INFORMATION: oligonucleotide
US-10-831-267-16

Query Match          4.2%; Score 19; DB 1; Length 19;
Best Local Similarity 68.4%; Pred. No. 82;
Matches 13; Conservative 6; Mismatches 0; Indels 0; Gaps 0;

Qy 42 TTGCTAACCCCTAACTGAG 60
    :||:|||||
Db 1 UUGUCUAAACCUACUGAG 19

RESULT 74
US-10-831-267-17/c
; Sequence 17, Application US/10831267
; Publication No. US20050009177A1
; GENERAL INFORMATION:
; APPLICANT: Rowley, Peter T.
; TITLE OF INVENTION: TELOMERASE INTERFERENCE
; FILE REFERENCE: A-71506-2/RFT/THR
; CURRENT APPLICATION NUMBER: US/10/831.267
; CURRENT FILING DATE: 2004-04-22
; PRIOR APPLICATION NUMBER: PCT/US 02/33146
; PRIOR FILING DATE: 2002-10-16
```

```
; PRIOR APPLICATION NUMBER: US 60/345,326
; PRIOR FILING DATE: 2001-10-22
; PRIOR APPLICATION NUMBER: US 60/359,196
; PRIOR FILING DATE: 2002-02-20
; PRIOR APPLICATION NUMBER: US 60/383,195
; PRIOR FILING DATE: 2002-05-22
; NUMBER OF SEQ ID NOS: 23
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 17
; LENGTH: 19
; TYPE: RNA
; ORGANISM: Artificial
; FEATURE:
; OTHER INFORMATION: oligonucleotide
US-10-831-267-17

Query Match          4.2%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 82;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 42 TTGCTAACCCCTAACTGAG 60
    |||||
Db 19 TTGCTAACCCCTAACTGAG 1

RESULT 75
US-10-831-267-18
; Sequence 18, Application US/10831267
; Publication No. US20050009177A1
; GENERAL INFORMATION:
; APPLICANT: Rowley, Peter T.
; TITLE OF INVENTION: TELOMERASE INTERFERENCE
; FILE REFERENCE: A-71506-2/RFT/THR
; CURRENT APPLICATION NUMBER: US/10/831.267
; CURRENT FILING DATE: 2004-04-22
; PRIOR APPLICATION NUMBER: PCT/US 02/33146
; PRIOR FILING DATE: 2002-10-16
; PRIOR APPLICATION NUMBER: US 60/345,326
; PRIOR FILING DATE: 2001-10-22
; PRIOR APPLICATION NUMBER: US 60/359,196
; PRIOR FILING DATE: 2002-02-20
; PRIOR APPLICATION NUMBER: US 60/383,195
; PRIOR FILING DATE: 2002-05-22
; NUMBER OF SEQ ID NOS: 23
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 18
; LENGTH: 19
; TYPE: DNA
; ORGANISM: Artificial
; FEATURE:
; OTHER INFORMATION: oligonucleotide
US-10-831-267-18

Query Match          4.2%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 82;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 270 GGCTTCTCCGAGGCACCC 288
    |||||
Db 1 GGCTTCTCCGAGGCACCC 19

RESULT 76
US-10-831-267-19/c
; Sequence 19, Application US/10831267
; Publication No. US20050009177A1
; GENERAL INFORMATION:
; APPLICANT: Rowley, Peter T.
; TITLE OF INVENTION: TELOMERASE INTERFERENCE
; FILE REFERENCE: A-71506-2/RFT/THR
; CURRENT APPLICATION NUMBER: US/10/831.267
; CURRENT FILING DATE: 2004-04-22
; PRIOR APPLICATION NUMBER: PCT/US 02/33146
```

; PRIOR FILING DATE: 2002-10-16  
; PRIOR APPLICATION NUMBER: US 60/345,326  
; PRIOR FILING DATE: 2001-10-22  
; PRIOR APPLICATION NUMBER: US 60/359,196  
; PRIOR FILING DATE: 2002-02-20  
; PRIOR APPLICATION NUMBER: US 60/383,195  
; PRIOR FILING DATE: 2002-05-22  
; NUMBER OF SEQ ID NOS: 23  
; SOFTWARE: PatentIn version 3.2  
; SEQ ID NO 19  
; LENGTH: 19  
; TYPE: DNA  
; ORGANISM: Artificial  
; FEATURE:  
; OTHER INFORMATION: oligonucleotide  
US-10-831-267-19

Query Match 4.2%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 82;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 270 GGCTTCTCCGGAGGACCC 288  
Db 19 GGCTTCTCCGGAGGACCC 1

RESULT 77  
US-10-714-195-343  
; Sequence 343, Application US/10714195  
; Publication No. US20050019785A1  
; GENERAL INFORMATION:  
; APPLICANT: Baker, Joffre  
; APPLICANT: Cronin, Maureen  
; APPLICANT: Shak, Steve  
; APPLICANT: Baselga, Jose  
; TITLE OF INVENTION: GENE EXPRESSION PROFILING OF EGFR  
; TITLE OF INVENTION: POSITIVE CANCER  
; FILE REFERENCE: 39740-0005  
; CURRENT APPLICATION NUMBER: US/10/714,195  
; CURRENT FILING DATE: 2003-11-14  
; PRIOR APPLICATION NUMBER: 60/427090  
; PRIOR FILING DATE: 2003-11-15  
; NUMBER OF SEQ ID NOS: 372  
; SOFTWARE: FastSeq for Windows Version 4.0  
; SEQ ID NO 343  
; LENGTH: 19  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: primer  
US-10-714-195-343

Query Match 4.2%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 82;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 371 AAGAGGAACGGAGCGACTC 389  
Db 1 AAGAGGAACGGAGCGAGTC 19

RESULT 78  
US-10-714-195-344/c  
; Sequence 344, Application US/10714195  
; Publication No. US20050019785A1  
; GENERAL INFORMATION:  
; APPLICANT: Baker, Joffre  
; APPLICANT: Cronin, Maureen  
; APPLICANT: Shak, Steve  
; APPLICANT: Baselga, Jose  
; TITLE OF INVENTION: GENE EXPRESSION PROFILING OF EGFR  
; TITLE OF INVENTION: POSITIVE CANCER  
; FILE REFERENCE: 39740-0005

; CURRENT APPLICATION NUMBER: US/10/714,195  
; CURRENT FILING DATE: 2003-11-14  
; PRIOR APPLICATION NUMBER: 60/427090  
; PRIOR FILING DATE: 2003-11-15  
; NUMBER OF SEQ ID NOS: 372  
; SOFTWARE: FastSeq for Windows Version 4.0  
; SEQ ID NO 344  
; LENGTH: 19  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: primer  
US-10-714-195-344

Query Match 4.2%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 82;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 431 CAGGACTCGGCTCACACAT 449  
Db 19 CAGGACTCGGCTCACACAT 1

RESULT 79  
US-10-923-330-7  
; Sequence 7, Application US/10923330  
; Publication No. US20050153916A1  
; GENERAL INFORMATION:  
; APPLICANT: Sirna Therapeutics, Inc.  
; APPLICANT: McSwiggen, James  
; APPLICANT: Beigelman, Leonid  
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene  
; TITLE OF INVENTION: Expression Using Short Interfering RNA (siRNA)  
; FILE REFERENCE: 400/209 (WBHB02-708-C)  
; CURRENT APPLICATION NUMBER: US/10/923,330  
; CURRENT FILING DATE: 2004-08-20  
; PRIOR APPLICATION NUMBER: PCT/US03/04088  
; PRIOR FILING DATE: 2004-05-24  
; PRIOR APPLICATION NUMBER: US 60/396,600  
; PRIOR FILING DATE: 2002-07-17  
; PRIOR APPLICATION NUMBER: PCT/US04/16390  
; PRIOR FILING DATE: 2004-05-24  
; PRIOR APPLICATION NUMBER: US 10/826,966  
; PRIOR FILING DATE: 2004-04-16  
; PRIOR APPLICATION NUMBER: US 10/757,803  
; PRIOR FILING DATE: 2004-01-14  
; PRIOR APPLICATION NUMBER: US 10/720,448  
; PRIOR FILING DATE: 2003-11-24  
; PRIOR APPLICATION NUMBER: US 10/693,059  
; PRIOR FILING DATE: 2003-11-23  
; PRIOR APPLICATION NUMBER: US 10/444,853  
; PRIOR FILING DATE: 2003-05-23  
; PRIOR APPLICATION NUMBER: PCT/US03/05346  
; PRIOR FILING DATE: 2003-02-20  
; PRIOR APPLICATION NUMBER: PCT/US03/05028  
; Remaining Prior Application data removed - See File Wrapper or PALM.  
; NUMBER OF SEQ ID NOS: 768  
; SOFTWARE: PatentIn version 3.3  
; SEQ ID NO 7  
; LENGTH: 19  
; TYPE: RNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siRNA sense re  
US-10-923-330-7

Query Match 4.2%; Score 19; DB 1; Length 19;  
Best Local Similarity 78.9%; Pred. No. 82;  
Matches 15; Conservative 4; Mismatches 0; Indels 0; Gaps 0;  
QY 14 TGGGCGCTGGGGGGGTGCT 32  
:|||||:|||||:|||||:|||||:

Db 1 UGGCCUGGAGGGGUGGU 19

RESULT 80

US-10-923-330-8

Sequence 8, Application US/10923330

Publication No. US20050153916A1

GENERAL INFORMATION:

APPLICANT: Sirna Therapeutics, Inc.

APPLICANT: Beigelman, Leonid

TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene

FILE REFERENCE: 400/209 (MBHB02-708-C)

CURRENT APPLICATION NUMBER: US/10/923,330

CURRENT FILING DATE: 2004-08-20

PRIOR APPLICATION NUMBER: PCT/US03/04088

PRIOR FILING DATE: 2004-05-24

PRIOR APPLICATION NUMBER: US 60/396,600

PRIOR FILING DATE: 2002-07-17

PRIOR APPLICATION NUMBER: PCT/US04/16390

PRIOR FILING DATE: 2004-05-24

PRIOR APPLICATION NUMBER: US 10/826,966

PRIOR FILING DATE: 2004-04-16

PRIOR APPLICATION NUMBER: US 10/720,448

PRIOR FILING DATE: 2003-11-24

PRIOR APPLICATION NUMBER: US 10/693,059

PRIOR FILING DATE: 2003-05-23

PRIOR APPLICATION NUMBER: US 10/444,853

PRIOR FILING DATE: 2003-11-23

PRIOR APPLICATION NUMBER: PCT/US03/05346

PRIOR FILING DATE: 2003-02-20

PRIOR APPLICATION NUMBER: PCT/US03/05028

PRIOR FILING DATE: 2003-02-20

Remaining Prior Application data removed - See File Wrapper or PALM.

NUMBER OF SEQ ID NOS: 768

SOFTWARE: PatentIn version 3.3

SEQ ID NO 8

LENGTH: 19

TYPE: RNA

ORGANISM: Artificial Sequence

FEATURE:

OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA sense x

US-10-923-330-8

Query Match 4.2%; Score 19; DB 1; Length 19;

Best Local Similarity 52.6%; Pred. No. 82;

Matches 10; Conservative 9; Mismatches 0; Indels 0; Gaps 0;

Qy 32 TGGCCATTTTGTCTAAC 50

Db 1 UGGCCAUUUUUGUCUAC 19

RESULT 81

US-10-923-330-9

Sequence 9, Application US/10923330

Publication No. US20050153916A1

GENERAL INFORMATION:

APPLICANT: Sirna Therapeutics, Inc.

APPLICANT: Beigelman, Leonid

TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene

FILE REFERENCE: 400/209 (MBHB02-708-C)

CURRENT APPLICATION NUMBER: US/10/923,330

CURRENT FILING DATE: 2004-08-20

PRIOR APPLICATION NUMBER: PCT/US03/04088

PRIOR FILING DATE: 2004-05-24

PRIOR APPLICATION NUMBER: US 60/396,600

PRIOR FILING DATE: 2002-07-17

PRIOR APPLICATION NUMBER: PCT/US04/16390

PRIOR FILING DATE: 2004-05-24

PRIOR APPLICATION NUMBER: US 10/826,966

PRIOR FILING DATE: 2004-04-16

PRIOR APPLICATION NUMBER: US 10/757,803

PRIOR FILING DATE: 2004-01-14

PRIOR APPLICATION NUMBER: US 10/720,448

PRIOR FILING DATE: 2003-11-24

PRIOR APPLICATION NUMBER: US 10/693,059

PRIOR FILING DATE: 2003-11-23

PRIOR APPLICATION NUMBER: US 10/444,853

PRIOR FILING DATE: 2003-05-23

PRIOR APPLICATION NUMBER: PCT/US03/05346

PRIOR FILING DATE: 2003-02-20

PRIOR APPLICATION NUMBER: PCT/US03/05028

PRIOR FILING DATE: 2003-02-20

Remaining Prior Application data removed - See File Wrapper or PALM.

NUMBER OF SEQ ID NOS: 768

SOFTWARE: PatentIn version 3.3

SEQ ID NO 9

LENGTH: 19

TYPE: RNA

ORGANISM: Artificial Sequence

FEATURE:

OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA sense x

US-10-923-330-9

Query Match 4.2%; Score 19; DB 1; Length 19;

Best Local Similarity 84.2%; Pred. No. 82;

Matches 16; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

Qy 50 CCTAACTGAGAAGGGCGT 68

Db 1 CCCUACUGAGAAGGGCGU 19

RESULT 82

US-10-923-330-10

Sequence 10, Application US/10923330

Publication No. US20050153916A1

GENERAL INFORMATION:

APPLICANT: Sirna Therapeutics, Inc.

APPLICANT: Beigelman, Leonid

TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene

FILE REFERENCE: 400/209 (MBHB02-708-C)

CURRENT APPLICATION NUMBER: US/10/923,330

CURRENT FILING DATE: 2004-08-20

PRIOR APPLICATION NUMBER: PCT/US03/04088

PRIOR FILING DATE: 2004-05-24

PRIOR APPLICATION NUMBER: US 60/396,600

PRIOR FILING DATE: 2002-07-17

PRIOR APPLICATION NUMBER: PCT/US04/16390

PRIOR FILING DATE: 2004-05-24

PRIOR APPLICATION NUMBER: US 10/826,966

PRIOR FILING DATE: 2004-04-16

PRIOR APPLICATION NUMBER: US 10/757,803

PRIOR FILING DATE: 2004-01-14

PRIOR APPLICATION NUMBER: US 10/720,448

PRIOR FILING DATE: 2003-11-24

PRIOR APPLICATION NUMBER: US 10/693,059

PRIOR FILING DATE: 2003-11-23

PRIOR APPLICATION NUMBER: US 10/444,853

PRIOR FILING DATE: 2003-05-23

PRIOR APPLICATION NUMBER: PCT/US03/05346

PRIOR FILING DATE: 2003-02-20

PRIOR APPLICATION NUMBER: PCT/US03/05028

PRIOR FILING DATE: 2003-02-20

Remaining Prior Application data removed - See File Wrapper or PALM.

NUMBER OF SEQ ID NOS: 768

SOFTWARE: PatentIn version 3.3

SEQ ID NO 10

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; LENGTH: 19
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA sense 1
US-10-923-330-10

Query Match          4.2%; Score 19; DB 1; Length 19;
Best Local Similarity 63.2%; Pred. No. 82;
Matches 12; Conservative 7; Mismatches 0; Indels 0; Gaps 0;

QY 68 TAGGCGCGCTGCTTTTGCT 86
Db 1 UAGGCGCGCGCUUUUGCU 19

RESULT 83
US-10-923-330-11
; Sequence 11, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; PRIOR FILING DATE: 2003-02-20
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 11
; LENGTH: 19
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA sense 1
US-10-923-330-11

Query Match          4.2%; Score 19; DB 1; Length 19;
Best Local Similarity 63.2%; Pred. No. 82;
Matches 12; Conservative 7; Mismatches 0; Indels 0; Gaps 0;

QY 86 TCCCGCGCGCTGCTTTTTC 104
Db 1 UCCCGCGCGCUUUUUC 19

RESULT 84
US-10-923-330-12
; Sequence 12, Application US/10923330
; Publication No. US20050153916A1
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; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; PRIOR FILING DATE: 2003-02-20
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 12
; LENGTH: 19
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA sense 1
US-10-923-330-12

Query Match          4.2%; Score 19; DB 1; Length 19;
Best Local Similarity 73.7%; Pred. No. 82;
Matches 14; Conservative 5; Mismatches 0; Indels 0; Gaps 0;

QY 104 CTCGCTGACTTTCAGCGGG 122
Db 1 CUCCGUGACUUCAGCGGG 19

RESULT 85
US-10-923-330-13
; Sequence 13, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
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; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 13
; LENGTH: 19
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA sense r
US-10-923-330-13

Query Match      4.2%; Score 19; DB 1; Length 19;
Best Local Similarity 89.5%; Pred. No. 82;
Matches 17; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

Qy 122 GCGGAAAAGCTCGGCTG 140
Db 1 GCGGAAAAGCCUCGCGCTG 19

RESULT 86
US-10-923-330-14
; Sequence 14, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 15
; LENGTH: 19
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA sense r
US-10-923-330-15

Query Match      4.2%; Score 19; DB 1; Length 19;
Best Local Similarity 89.5%; Pred. No. 82;
Matches 17; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

Qy 122 GCGGAAAAGCTCGGCTG 140
Db 1 GCGGAAAAGCCUCGCGCTG 19

RESULT 86
US-10-923-330-14
; Sequence 14, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 14
; LENGTH: 19
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA sense r
US-10-923-330-14
```

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Query Match      4.2%; Score 19; DB 1; Length 19;
Best Local Similarity 73.7%; Pred. No. 82;
Matches 14; Conservative 5; Mismatches 0; Indels 0; Gaps 0;

Qy 140 GCGGCTTCCACCGTTTCAT 158
Db 1 GCGGCUUCCACCGUUCAN 19

RESULT 87
US-10-923-330-15
; Sequence 15, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 15
; LENGTH: 19
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA sense r
US-10-923-330-15

Query Match      4.2%; Score 19; DB 1; Length 19;
Best Local Similarity 84.2%; Pred. No. 82;
Matches 16; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

Qy 158 TTCTAGAGCAACAAAAA 176
Db 1 UUCUAGAGCAACAAAAA 19

RESULT 88
US-10-923-330-16
; Sequence 16, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBHB02-708-C)
; FILE REFERENCE: 400/209 (MBHB02-708-C)
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; CURRENT APPLICATION NUMBER: US/10/923,330  
; CURRENT FILING DATE: 2004-08-20  
; PRIOR APPLICATION NUMBER: PCT/US03/04088  
; PRIOR FILING DATE: 2004-05-24  
; PRIOR APPLICATION NUMBER: US 60/396,600  
; PRIOR FILING DATE: 2002-07-17  
; PRIOR APPLICATION NUMBER: PCT/US04/16390  
; PRIOR FILING DATE: 2004-05-24  
; PRIOR APPLICATION NUMBER: US 10/826,966  
; PRIOR FILING DATE: 2004-04-16  
; PRIOR APPLICATION NUMBER: US 10/757,803  
; PRIOR FILING DATE: 2004-01-14  
; PRIOR APPLICATION NUMBER: US 10/720,448  
; PRIOR FILING DATE: 2003-11-24  
; PRIOR APPLICATION NUMBER: US 10/693,059  
; PRIOR FILING DATE: 2003-11-23  
; PRIOR APPLICATION NUMBER: US 10/444,853  
; PRIOR FILING DATE: 2003-05-23  
; PRIOR APPLICATION NUMBER: PCT/US03/05346  
; PRIOR FILING DATE: 2003-02-20  
; PRIOR APPLICATION NUMBER: PCT/US03/05028  
; PRIOR FILING DATE: 2003-02-20  
; Remaining Prior Application data removed - See File Wrapper or PALM.  
; SOFTWARE: PatentIn version 3.3  
; NUMBER OF SEQ ID NOS: 768  
; SEQ ID NO 16  
; LENGTH: 19  
; TYPE: RNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA sense  
US-10-923-330-16

Query Match 4.2%; Score 19; DB 1; Length 19;  
Best Local Similarity 73.7%; Pred. No. 82;  
Matches 14; Conservative 5; Mismatches 0; Indels 0; Gaps 0;

Qy 176 ATGTCAGCTGTCGCCCGT 194  
Db 1 AUGUCAGCUGCGCCCGU 19

RESULT 89  
US-10-923-330-17  
; Sequence 17, Application US/10923330  
; Publication No. US20050153916A1  
; GENERAL INFORMATION:  
; APPLICANT: Sirna Therapeutics, Inc.  
; APPLICANT: McSwiggen, James  
; APPLICANT: Beigelman, Leonid  
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene  
; FILE REFERENCE: 400/209 (MBHB02-708-C)  
; CURRENT APPLICATION NUMBER: US/10/923,330  
; CURRENT FILING DATE: 2004-08-20  
; PRIOR APPLICATION NUMBER: PCT/US03/04088  
; PRIOR FILING DATE: 2004-05-24  
; PRIOR APPLICATION NUMBER: US 60/396,600  
; PRIOR FILING DATE: 2002-07-17  
; PRIOR APPLICATION NUMBER: PCT/US04/16390  
; PRIOR FILING DATE: 2004-05-24  
; PRIOR APPLICATION NUMBER: US 10/826,966  
; PRIOR FILING DATE: 2004-04-16  
; PRIOR APPLICATION NUMBER: US 10/757,803  
; PRIOR FILING DATE: 2004-01-14  
; PRIOR APPLICATION NUMBER: US 10/720,448  
; PRIOR FILING DATE: 2003-11-24  
; PRIOR APPLICATION NUMBER: US 10/693,059  
; PRIOR FILING DATE: 2003-11-23  
; PRIOR APPLICATION NUMBER: US 10/444,853  
; PRIOR FILING DATE: 2003-05-23  
; PRIOR APPLICATION NUMBER: PCT/US03/05346  
; PRIOR FILING DATE: 2003-02-20

; PRIOR APPLICATION NUMBER: PCT/US03/05028  
; PRIOR FILING DATE: 2003-02-20  
; Remaining Prior Application data removed - See File Wrapper or PALM.  
; NUMBER OF SEQ ID NOS: 768  
; SOFTWARE: PatentIn version 3.3  
; SEQ ID NO 17  
; LENGTH: 19  
; TYPE: RNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA sense  
US-10-923-330-17

Query Match 4.2%; Score 19; DB 1; Length 19;  
Best Local Similarity 84.2%; Pred. No. 82;  
Matches 16; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

Qy 194 TTGCGCCCTCCCGGGGACC 212  
Db 1 UUGCGCCCUCCCGGGGACC 19

RESULT 90  
US-10-923-330-18  
; Sequence 18, Application US/10923330  
; Publication No. US20050153916A1  
; GENERAL INFORMATION:  
; APPLICANT: Sirna Therapeutics, Inc.  
; APPLICANT: McSwiggen, James  
; APPLICANT: Beigelman, Leonid  
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene  
; FILE REFERENCE: 400/209 (MBHB02-708-C)  
; CURRENT APPLICATION NUMBER: US/10/923,330  
; CURRENT FILING DATE: 2004-08-20  
; PRIOR APPLICATION NUMBER: PCT/US03/04088  
; PRIOR FILING DATE: 2004-05-24  
; PRIOR APPLICATION NUMBER: US 60/396,600  
; PRIOR FILING DATE: 2002-07-17  
; PRIOR APPLICATION NUMBER: PCT/US04/16390  
; PRIOR FILING DATE: 2004-05-24  
; PRIOR APPLICATION NUMBER: US 10/826,966  
; PRIOR FILING DATE: 2004-04-16  
; PRIOR APPLICATION NUMBER: US 10/757,803  
; PRIOR FILING DATE: 2004-01-14  
; PRIOR APPLICATION NUMBER: US 10/720,448  
; PRIOR FILING DATE: 2003-11-24  
; PRIOR APPLICATION NUMBER: US 10/693,059  
; PRIOR FILING DATE: 2003-11-23  
; PRIOR APPLICATION NUMBER: US 10/444,853  
; PRIOR FILING DATE: 2003-05-23  
; PRIOR APPLICATION NUMBER: PCT/US03/05346  
; PRIOR FILING DATE: 2003-02-20  
; PRIOR APPLICATION NUMBER: PCT/US03/05028  
; Remaining Prior Application data removed - See File Wrapper or PALM.  
; NUMBER OF SEQ ID NOS: 768  
; SOFTWARE: PatentIn version 3.3  
; SEQ ID NO 18  
; LENGTH: 19  
; TYPE: RNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA sense  
US-10-923-330-18

Query Match 4.2%; Score 19; DB 1; Length 19;  
Best Local Similarity 84.2%; Pred. No. 82;  
Matches 16; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

Qy 212 CTGCGCGGGTCCGCTGCC 230  
Db 1 CUGCGCGGGGUGCGCCGCC 19

```
RESULT 91
US-10-923-330-19
; Sequence 19, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923.330
; PRIOR FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; PRIOR FILING DATE: 2003-02-20
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: Patentin version 3.3
; SEQ ID NO 19
; LENGTH: 19
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA sense r
US-10-923-330-19
Query Match 4.2%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 82;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 230 CCAGCCCCCGAACCCCGCC 248
Db 1 CCAGCCCCCGAACCCCGCC 19

RESULT 92
US-10-923-330-20
; Sequence 20, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923.330
; PRIOR FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
```

```
US-10-923-330-20
; Sequence 21, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923.330
; PRIOR FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: Patentin version 3.3
; SEQ ID NO 20
; LENGTH: 19
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA sense r
US-10-923-330-20
Query Match 4.2%; Score 19; DB 1; Length 19;
Best Local Similarity 89.5%; Pred. No. 82;
Matches 17; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

Qy 248 CTGAGGCGCGCGTCGCCC 266
Db 1 CUGAGGCGCGCGGCGGCC 19

RESULT 93
US-10-923-330-21
; Sequence 21, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923.330
; PRIOR FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: Patentin version 3.3
; SEQ ID NO 21
; LENGTH: 19
```

```
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA sense r
US-10-923-330-21

Query Match          4.2%; Score 19; DB 1; Length 19;
Best Local Similarity 84.2%; Pred. No. 82;
Matches 16; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

QY      266 CCGGGGCTTCTCCGGAGGC 284
Db      1 CCGGGGCUUCUCCGGAGGC 19

RESULT 94
US-10-923-330-22
; Sequence 22, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; PRIOR FILING DATE: 2003-02-20
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 22
; LENGTH: 19
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA sense r
US-10-923-330-23

Query Match          4.2%; Score 19; DB 1; Length 19;
Best Local Similarity 94.7%; Pred. No. 82;
Matches 18; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY      284 CACCCACTGCCACCGGAA 302
Db      1 CACCCACUGCCACCGGAA 19

RESULT 95
US-10-923-330-23
; Sequence 23, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
```

```
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; PRIOR FILING DATE: 2003-02-20
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 23
; LENGTH: 19
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA sense r
US-10-923-330-23

Query Match          4.2%; Score 19; DB 1; Length 19;
Best Local Similarity 73.7%; Pred. No. 82;
Matches 14; Conservative 5; Mismatches 0; Indels 0; Gaps 0;

QY      302 AGAGTTGGGCTCTGTTCAGC 320
Db      1 AGAGUUGGGCUCUGCAGC 19

RESULT 96
US-10-923-330-24
; Sequence 24, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
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;; PRIOR APPLICATION NUMBER: US 10/693,059  
;; PRIOR FILING DATE: 2003-11-23  
;; PRIOR APPLICATION NUMBER: US 10/444,853  
;; PRIOR FILING DATE: 2003-05-23  
;; PRIOR APPLICATION NUMBER: PCT/US03/05346  
;; PRIOR FILING DATE: 2003-02-20  
;; PRIOR APPLICATION NUMBER: PCT/US03/05028  
;; PRIOR FILING DATE: 2003-02-20  
;; Remaining Prior Application data removed - See File Wrapper or PALM.  
;; NUMBER OF SEQ ID NOS: 768  
;; SOFTWARE: PatentIn version 3.3  
;; SEQ ID NO 24  
;; LENGTH: 19  
;; TYPE: RNA  
;; ORGANISM: Artificial Sequence  
;; FEATURE:  
;; OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA sense  
US-10-923-330-24

Query Match 4.2%; Score 19; DB 1; Length 19;  
Best Local Similarity 84.2%; Pred. No. 82;  
Matches 16; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

Qy 320 CCGCGGGTCTCTCGGGGC 338  
Db 1 CCGCGGGUCUCUCGGGCGC 19

RESULT 97  
US-10-923-330-25  
;; Sequence 25, Application US/10923330  
;; Publication No. US20050153916A1  
;; GENERAL INFORMATION:  
;; APPLICANT: McSwiggen, James  
;; APPLICANT: Beigelman, Leonid  
;; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene  
;; FILE REFERENCE: 400/209 (MBHB02-708-C)  
;; CURRENT APPLICATION NUMBER: US/10/923,330  
;; CURRENT FILING DATE: 2004-08-20  
;; PRIOR APPLICATION NUMBER: PCT/US03/04088  
;; PRIOR FILING DATE: 2004-05-24  
;; PRIOR APPLICATION NUMBER: US 60/396,600  
;; PRIOR FILING DATE: 2002-07-17  
;; PRIOR APPLICATION NUMBER: PCT/US04/16390  
;; PRIOR FILING DATE: 2004-05-24  
;; PRIOR APPLICATION NUMBER: US 10/826,966  
;; PRIOR FILING DATE: 2004-04-16  
;; PRIOR APPLICATION NUMBER: US 10/757,803  
;; PRIOR FILING DATE: 2004-01-14  
;; PRIOR APPLICATION NUMBER: US 10/720,448  
;; PRIOR FILING DATE: 2003-11-24  
;; PRIOR APPLICATION NUMBER: US 10/693,059  
;; PRIOR FILING DATE: 2003-11-23  
;; PRIOR APPLICATION NUMBER: US 10/444,853  
;; PRIOR FILING DATE: 2003-05-23  
;; PRIOR APPLICATION NUMBER: PCT/US03/05346  
;; PRIOR FILING DATE: 2003-02-20  
;; PRIOR APPLICATION NUMBER: PCT/US03/05028  
;; PRIOR FILING DATE: 2003-02-20  
;; Remaining Prior Application data removed - See File Wrapper or PALM.  
;; NUMBER OF SEQ ID NOS: 768  
;; SOFTWARE: PatentIn version 3.3  
;; SEQ ID NO 25  
;; LENGTH: 19  
;; TYPE: RNA  
;; ORGANISM: Artificial Sequence  
;; FEATURE:  
;; OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA sense  
US-10-923-330-25

Query Match 4.2%; Score 19; DB 1; Length 19;  
Best Local Similarity 84.2%; Pred. No. 82;  
Matches 16; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

Qy 320 CCGCGGGTCTCTCGGGGC 338  
Db 1 CCGCGGGUCUCUCGGGCGC 19

Best Local Similarity 89.5%; Pred. No. 82;  
Matches 17; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

Qy 338 CGAGGCGCAGGTTTCAGGCC 356  
Db 1 CGAGGCGCAGGUUCAGGCC 19

RESULT 98  
US-10-923-330-26  
;; Sequence 26, Application US/10923330  
;; Publication No. US20050153916A1  
;; GENERAL INFORMATION:  
;; APPLICANT: McSwiggen, James  
;; APPLICANT: Beigelman, Leonid  
;; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene  
;; FILE REFERENCE: 400/209 (MBHB02-708-C)  
;; CURRENT APPLICATION NUMBER: US/10/923,330  
;; CURRENT FILING DATE: 2004-08-20  
;; PRIOR APPLICATION NUMBER: PCT/US03/04088  
;; PRIOR FILING DATE: 2004-05-24  
;; PRIOR APPLICATION NUMBER: US 60/396,600  
;; PRIOR FILING DATE: 2002-07-17  
;; PRIOR APPLICATION NUMBER: PCT/US04/16390  
;; PRIOR FILING DATE: 2004-05-24  
;; PRIOR APPLICATION NUMBER: US 10/826,966  
;; PRIOR FILING DATE: 2004-04-16  
;; PRIOR APPLICATION NUMBER: US 10/757,803  
;; PRIOR FILING DATE: 2004-01-14  
;; PRIOR APPLICATION NUMBER: US 10/720,448  
;; PRIOR FILING DATE: 2003-11-24  
;; PRIOR APPLICATION NUMBER: US 10/693,059  
;; PRIOR FILING DATE: 2003-11-23  
;; PRIOR APPLICATION NUMBER: US 10/444,853  
;; PRIOR FILING DATE: 2003-05-23  
;; PRIOR APPLICATION NUMBER: PCT/US03/05346  
;; PRIOR FILING DATE: 2003-02-20  
;; PRIOR APPLICATION NUMBER: PCT/US03/05028  
;; PRIOR FILING DATE: 2003-02-20  
;; Remaining Prior Application data removed - See File Wrapper or PALM.  
;; NUMBER OF SEQ ID NOS: 768  
;; SOFTWARE: PatentIn version 3.3  
;; SEQ ID NO 26  
;; LENGTH: 19  
;; TYPE: RNA  
;; ORGANISM: Artificial Sequence  
;; FEATURE:  
;; OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA sense  
US-10-923-330-26

Query Match 4.2%; Score 19; DB 1; Length 19;  
Best Local Similarity 84.2%; Pred. No. 82;  
Matches 16; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

Qy 356 CTTTCAGGCGCAGGAAGA 374  
Db 1 CUUUCAGGCGCAGGAAGA 19

RESULT 99  
US-10-923-330-27  
;; Sequence 27, Application US/10923330  
;; Publication No. US20050153916A1  
;; GENERAL INFORMATION:  
;; APPLICANT: McSwiggen, James  
;; APPLICANT: Beigelman, Leonid  
;; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene  
;; FILE REFERENCE: 400/209 (MBHB02-708-C)  
;; CURRENT APPLICATION NUMBER: US/10/923,330

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; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 27
; LENGTH: 19
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA sense
US-10-923-330-27

Query Match          4.2%; Score 19; DB 1; Length 19;
Best Local Similarity 94.7%; Pred. No. 82;
Matches 18; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 374 AGGAACGGAGCGAGTCCTCCC 392
Db 1 AGGAACGGAGCGAGUCCCC 19

RESULT 100
US-10-923-330-28
; Sequence 28, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 29
; LENGTH: 19
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA sense
US-10-923-330-29

Query Match          4.2%; Score 19; DB 1; Length 19;
Best Local Similarity 94.7%; Pred. No. 82;
Matches 18; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 374 AGGAACGGAGCGAGTCCTCCC 392
Db 1 AGGAACGGAGCGAGUCCCC 19

RESULT 100
US-10-923-330-28
; Sequence 28, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 29
; LENGTH: 19
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA sense
US-10-923-330-29
```

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; PRIOR FILING DATE: 2003-02-20
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 28
; LENGTH: 19
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA sense
US-10-923-330-28

Query Match          4.2%; Score 19; DB 1; Length 19;
Best Local Similarity 89.5%; Pred. No. 82;
Matches 17; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

Qy 392 CGCGCGCGCGCGGATTCCTCCC 410
Db 1 CGCGCGCGCGCGGAGUCCCC 19

RESULT 101
US-10-923-330-29
; Sequence 29, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 29
; LENGTH: 19
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA sense
US-10-923-330-29

Query Match          4.2%; Score 19; DB 1; Length 19;
Best Local Similarity 78.9%; Pred. No. 82;
Matches 15; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

Qy 410 CTGAGCTGTGGGACGTGCA 428
Db 1 CUGAGCTUGGGGACGUGCA 19
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; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; PRIOR FILING DATE: 2003-02-20
; Remaining prior application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 31
; LENGTH: 19
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA sense r
US-10-923-330-31

Query Match          4.2%; Score 19; DB 1; Length 19;
Best Local Similarity 84.2%; Pred. No. 82;
Matches 16; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

QY      431 CAGGACTCGGCTCACACAT 449
Db      1 CAGGACUCCGCCACACAU 19
      |||||:||||:||||:
      |||||:||||:||||:

RESULT 104
US-10-923-330-38/c
; Sequence 38, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: Expression Using Short Interfering RNA (siNA)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; PRIOR FILING DATE: 2003-02-20
; Remaining prior application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 38
; LENGTH: 19
; TYPE: RNA

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; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
US-10-923-330-38

Query Match          4.2%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 82;
Matches 19; Conservative 0; Mismatches 0; Gaps 0;

QY 14 TGGGCTGGGAGGGTGGT 32
Db 19 TGGGCTGGGAGGGTGGT 1

RESULT 105
US-10-923-330-39/c
; Sequence 39, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MHB02-708-C)
; CURRENT APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: US 10/923,330
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; PRIOR FILING DATE: 2003-02-20
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 39
; LENGTH: 19
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
US-10-923-330-40

Query Match          4.2%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 82;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 50 CCTAACTGAGAAGGGCGT 68
Db 19 CCTAACTGAGAAGGGCGT 1

RESULT 107
US-10-923-330-41/c
; Sequence 41, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059

; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
US-10-923-330-39

Query Match          4.2%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 82;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 32 TGGCCATTTTCTCTAAC 50
Db 19 TGGCCATTTTCTCTAAC 1

RESULT 106
US-10-923-330-40/c
; Sequence 40, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
```



;; PRIOR FILING DATE: 2003-11-23  
;; PRIOR APPLICATION NUMBER: US 10/444,853  
;; PRIOR FILING DATE: 2003-05-23  
;; PRIOR APPLICATION NUMBER: PCT/US03/05346  
;; PRIOR FILING DATE: 2003-02-20  
;; PRIOR APPLICATION NUMBER: PCT/US03/05028  
;; PRIOR FILING DATE: 2003-02-20  
;; Remaining Prior Application data removed - See File Wrapper or PALM.  
;; NUMBER OF SEQ ID NOS: 768  
;; SOFTWARE: PatentIn version 3.3  
;; SEQ ID NO 41  
;; LENGTH: 19  
;; TYPE: RNA  
;; ORGANISM: Artificial Sequence  
;; FEATURE:  
;; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region  
US-10-923-330-41

Query Match 4.2%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 82;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 68 TAGCGCGGCTGCTTTTGT 86  
Db 19 TAGCGCGGCTGCTTTTGT 1

RESULT 108  
US-10-923-330-42/c  
;; Sequence 42, Application US/10923330  
;; Publication No. US20050153916A1  
;; GENERAL INFORMATION:  
;; APPLICANT: Sirna Therapeutics, Inc.  
;; APPLICANT: McSwiggen, James  
;; APPLICANT: Beigelman, Leonid  
;; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene  
;; FILE REFERENCE: 400/209 (MBHB02-708-C)  
;; CURRENT APPLICATION NUMBER: US/10/923,330  
;; CURRENT FILING DATE: 2004-08-20  
;; PRIOR APPLICATION NUMBER: PCT/US03/04088  
;; PRIOR FILING DATE: 2004-05-24  
;; PRIOR APPLICATION NUMBER: US 60/396,600  
;; PRIOR FILING DATE: 2002-07-17  
;; PRIOR APPLICATION NUMBER: PCT/US04/16390  
;; PRIOR FILING DATE: 2004-05-24  
;; PRIOR APPLICATION NUMBER: US 10/826,966  
;; PRIOR FILING DATE: 2004-04-16  
;; PRIOR APPLICATION NUMBER: US 10/757,803  
;; PRIOR FILING DATE: 2004-01-14  
;; PRIOR APPLICATION NUMBER: US 10/720,448  
;; PRIOR FILING DATE: 2003-11-24  
;; PRIOR APPLICATION NUMBER: US 10/693,059  
;; PRIOR FILING DATE: 2003-11-23  
;; PRIOR APPLICATION NUMBER: US 10/444,853  
;; PRIOR FILING DATE: 2003-05-23  
;; PRIOR APPLICATION NUMBER: PCT/US03/05346  
;; PRIOR FILING DATE: 2003-02-20  
;; PRIOR APPLICATION NUMBER: PCT/US03/05028  
;; Remaining Prior Application data removed - See File Wrapper or PALM.  
;; NUMBER OF SEQ ID NOS: 768  
;; SOFTWARE: PatentIn version 3.3  
;; SEQ ID NO 43  
;; LENGTH: 19  
;; TYPE: RNA  
;; ORGANISM: Artificial Sequence  
;; FEATURE:  
;; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region  
US-10-923-330-43

Query Match 4.2%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 82;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 104 CTCGCTGACTTTCAGCGGG 122  
Db 19 CTCGCTGACTTTCAGCGGG 1

RESULT 110  
US-10-923-330-44/c  
;; Sequence 44, Application US/10923330  
;; Publication No. US20050153916A1  
;; GENERAL INFORMATION:  
;; APPLICANT: Sirna Therapeutics, Inc.  
;; APPLICANT: McSwiggen, James  
;; APPLICANT: Beigelman, Leonid  
;; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene  
;; FILE REFERENCE: 400/209 (MBHB02-708-C)  
;; CURRENT APPLICATION NUMBER: US/10/923,330  
;; CURRENT FILING DATE: 2004-08-20

Query Match 4.2%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 82;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; PRIOR FILING DATE: 2003-02-20
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 44
; LENGTH: 19
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
US-10-923-330-44

Query Match          4.2%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 82;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 122 GCGGAAAAGCCTCGCCTG 140
Db 19 GCGGAAAAGCCTCGCCTG 1

RESULT 111
US-10-923-330-45/c
; Sequence 45, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (WBHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; PRIOR FILING DATE: 2003-02-20
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 45
; LENGTH: 19
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
US-10-923-330-45

Query Match          4.2%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 82;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 122 GCGGAAAAGCCTCGCCTG 140
Db 19 GCGGAAAAGCCTCGCCTG 1

RESULT 112
US-10-923-330-46/c
; Sequence 46, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (WBHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; PRIOR FILING DATE: 2003-02-20
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 46
; LENGTH: 19
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
US-10-923-330-46

Query Match          4.2%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 82;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 158 TTCTAGAGCAACAAAAA 176
Db 19 TTCTAGAGCAACAAAAA 1
```

```
RESULT 113
US-10-923-330-47/c
; Sequence 47, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; TITLE OF INVENTION: Expression Using Short Interfering RNA (siRNA)
; FILE REFERENCE: 400/209 (MBHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923.330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; PRIOR FILING DATE: 2003-02-20
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 47
; LENGTH: 19
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siRNA antisense region
US-10-923-330-47

Query Match 4.2%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 82;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 176 ATGTCAGCTGCTGCCCGT 194
|||||
Db 19 ATGTCAGCTGCTGCCCGT 1

RESULT 114
US-10-923-330-48/c
; Sequence 48, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; TITLE OF INVENTION: Expression Using Short Interfering RNA (siRNA)
; FILE REFERENCE: 400/209 (MBHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923.330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 48
; LENGTH: 19
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siRNA antisense region
US-10-923-330-48

Query Match 4.2%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 82;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 176 ATGTCAGCTGCTGCCCGT 194
|||||
Db 19 ATGTCAGCTGCTGCCCGT 1

RESULT 115
US-10-923-330-49/c
; Sequence 49, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; TITLE OF INVENTION: Expression Using Short Interfering RNA (siRNA)
; FILE REFERENCE: 400/209 (MBHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923.330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; PRIOR FILING DATE: 2003-02-20
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 49
; LENGTH: 19
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siRNA antisense region
US-10-923-330-49

Query Match 4.2%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 82;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 194 TTGCGCCCTCCCGGGACC 212
|||||
Db 19 TTGCGCCCTCCCGGGACC 1
```

```
/
/ FEATURE:
/ OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
/ US-10-923-330-49

Query Match          4.2%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 82;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 212 CTGCGCGCGGTGCGCTGCC 230
Db 19 CTGCGCGCGGTGCGCTGCC 1

RESULT 116
US-10-923-330-50/c
/ Sequence 50, Application US/10923330
/ Publication No. US20050153916A1
/ GENERAL INFORMATION:
/ APPLICANT: McSwiggen, James
/ APPLICANT: Beigelman, Leonid
/ TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
/ FILE REFERENCE: 400/209 (MBH02-708-C)
/ CURRENT APPLICATION NUMBER: US/10/923,330
/ CURRENT FILING DATE: 2004-08-20
/ PRIOR APPLICATION NUMBER: PCT/US03/04088
/ PRIOR FILING DATE: 2004-05-24
/ PRIOR APPLICATION NUMBER: US 60/396,600
/ PRIOR FILING DATE: 2004-05-24
/ PRIOR APPLICATION NUMBER: PCT/US04/16390
/ PRIOR FILING DATE: 2004-05-24
/ PRIOR APPLICATION NUMBER: US 10/826,966
/ PRIOR FILING DATE: 2004-04-16
/ PRIOR APPLICATION NUMBER: US 10/757,803
/ PRIOR FILING DATE: 2004-01-14
/ PRIOR APPLICATION NUMBER: US 10/720,448
/ PRIOR FILING DATE: 2003-11-24
/ PRIOR APPLICATION NUMBER: US 10/693,059
/ PRIOR FILING DATE: 2003-11-23
/ PRIOR APPLICATION NUMBER: US 10/444,853
/ PRIOR FILING DATE: 2003-05-23
/ PRIOR APPLICATION NUMBER: PCT/US03/05346
/ PRIOR FILING DATE: 2003-02-20
/ PRIOR APPLICATION NUMBER: PCT/US03/05028
/ PRIOR FILING DATE: 2003-02-20
/ Remaining Prior Application data removed - See File Wrapper or PALM.
/ NUMBER OF SEQ ID NOS: 768
/ SOFTWARE: PatentIn version 3.3
/ SEQ ID NO 50
/ LENGTH: 19
/ TYPE: RNA
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
/ US-10-923-330-50

Query Match          4.2%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 82;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 230 CCAGCCCCCGAACCCGCC 248
Db 19 CCAGCCCCCGAACCCGCC 1

RESULT 117
US-10-923-330-51/c
/ Sequence 51, Application US/10923330
/ Publication No. US20050153916A1
/ GENERAL INFORMATION:
/ APPLICANT: McSwiggen, James
/ APPLICANT: Beigelman, Leonid
/ TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
/ FILE REFERENCE: 400/209 (MBH02-708-C)
/ CURRENT APPLICATION NUMBER: US/10/923,330
/ CURRENT FILING DATE: 2004-08-20
/ PRIOR APPLICATION NUMBER: PCT/US03/04088
/ PRIOR FILING DATE: 2004-05-24
/ PRIOR APPLICATION NUMBER: US 60/396,600
/ PRIOR FILING DATE: 2002-07-17
/ PRIOR APPLICATION NUMBER: PCT/US04/16390
/ PRIOR FILING DATE: 2004-05-24
/ PRIOR APPLICATION NUMBER: US 10/826,966
/ PRIOR FILING DATE: 2004-04-16
/ PRIOR APPLICATION NUMBER: US 10/757,803
/ PRIOR FILING DATE: 2004-01-14
/ PRIOR APPLICATION NUMBER: US 10/720,448
/ PRIOR FILING DATE: 2003-11-24
/ PRIOR APPLICATION NUMBER: US 10/693,059
/ PRIOR FILING DATE: 2003-11-23
/ Remaining Prior Application data removed - See File Wrapper or PALM.
/ NUMBER OF SEQ ID NOS: 768
/ SOFTWARE: PatentIn version 3.3
/ SEQ ID NO 50
/ LENGTH: 19
/ TYPE: RNA
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
/ US-10-923-330-50

Query Match          4.2%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 82;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 230 CCAGCCCCCGAACCCGCC 248
Db 19 CCAGCCCCCGAACCCGCC 1

RESULT 118
US-10-923-330-52/c
/ Sequence 52, Application US/10923330
/ Publication No. US20050153916A1
/ GENERAL INFORMATION:
/ APPLICANT: McSwiggen, James
/ APPLICANT: Beigelman, Leonid
/ TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
/ FILE REFERENCE: 400/209 (MBH02-708-C)
/ CURRENT APPLICATION NUMBER: US/10/923,330
/ CURRENT FILING DATE: 2004-08-20
/ PRIOR APPLICATION NUMBER: PCT/US03/04088
/ PRIOR FILING DATE: 2004-05-24
/ PRIOR APPLICATION NUMBER: US 60/396,600
/ PRIOR FILING DATE: 2002-07-17
/ PRIOR APPLICATION NUMBER: PCT/US04/16390
/ PRIOR FILING DATE: 2004-05-24
/ PRIOR APPLICATION NUMBER: US 10/826,966
/ PRIOR FILING DATE: 2004-04-16
/ PRIOR APPLICATION NUMBER: US 10/757,803
/ PRIOR FILING DATE: 2004-01-14
/ PRIOR APPLICATION NUMBER: US 10/720,448
/ PRIOR FILING DATE: 2003-11-24
/ PRIOR APPLICATION NUMBER: US 10/693,059
/ PRIOR FILING DATE: 2003-11-23
/ Remaining Prior Application data removed - See File Wrapper or PALM.
/ NUMBER OF SEQ ID NOS: 768
/ SOFTWARE: PatentIn version 3.3
/ SEQ ID NO 51
/ LENGTH: 19
/ TYPE: RNA
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
/ US-10-923-330-51

Query Match          4.2%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 82;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 248 CTGAGGCGCGGTGCGGC 266
Db 19 CTGAGGCGCGGTGCGGC 1

RESULT 118
US-10-923-330-52/c
/ Sequence 52, Application US/10923330
/ Publication No. US20050153916A1
/ GENERAL INFORMATION:
/ APPLICANT: McSwiggen, James
/ APPLICANT: Beigelman, Leonid
/ TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
/ FILE REFERENCE: 400/209 (MBH02-708-C)
/ CURRENT APPLICATION NUMBER: US/10/923,330
/ CURRENT FILING DATE: 2004-08-20
/ PRIOR APPLICATION NUMBER: PCT/US03/04088
/ PRIOR FILING DATE: 2004-05-24
/ PRIOR APPLICATION NUMBER: US 60/396,600
/ PRIOR FILING DATE: 2002-07-17
/ PRIOR APPLICATION NUMBER: PCT/US04/16390
/ PRIOR FILING DATE: 2004-05-24
/ PRIOR APPLICATION NUMBER: US 10/826,966
/ PRIOR FILING DATE: 2004-04-16
/ PRIOR APPLICATION NUMBER: US 10/757,803
/ PRIOR FILING DATE: 2004-01-14
/ PRIOR APPLICATION NUMBER: US 10/720,448
/ PRIOR FILING DATE: 2003-11-24
/ PRIOR APPLICATION NUMBER: US 10/693,059
/ PRIOR FILING DATE: 2003-11-23
/ Remaining Prior Application data removed - See File Wrapper or PALM.
/ NUMBER OF SEQ ID NOS: 768
/ SOFTWARE: PatentIn version 3.3
/ SEQ ID NO 51
/ LENGTH: 19
/ TYPE: RNA
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
/ US-10-923-330-51
```

```
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; PRIOR FILING DATE: 2003-02-20
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 52
; LENGTH: 19
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
US-10-923-330-52

Query Match          4.2%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 82;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      266 CCGGGGCTTCTCCGAGGC 284
Db      19 CCGGGGCTTCTCCGAGGC 1

RESULT 119
US-10-923-330-53/c
; Sequence 53, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBHB02-708-C)
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 54
; LENGTH: 19
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
US-10-923-330-54

Query Match          4.2%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 82;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      302 AGAGTTGGGCTCTGTCTCAGC 320
Db      19 AGAGTTGGGCTCTGTCTCAGC 1

RESULT 121
US-10-923-330-55/c
; Sequence 55, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBHB02-708-C)
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 53
; LENGTH: 19
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
US-10-923-330-53

Query Match          4.2%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 82;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      284 CACCCACTGCCACCGCAA 302
Db      19 CACCCACTGCCACCGCAA 1

RESULT 120
US-10-923-330-54/c
; Sequence 54, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBHB02-708-C)
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 54
; LENGTH: 19
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
US-10-923-330-54

Query Match          4.2%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 82;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      302 AGAGTTGGGCTCTGTCTCAGC 320
Db      19 AGAGTTGGGCTCTGTCTCAGC 1

RESULT 121
US-10-923-330-55/c
; Sequence 55, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBHB02-708-C)
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
```

```
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; PRIOR FILING DATE: 2003-02-20
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 55
; LENGTH: 19
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
US-10-923-330-55

Query Match          4.2%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 82;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      320  CCGCGGGTCTCTCGGGGGC 338
Db      19   CCGCGGGTCTCTCGGGGGC 1

RESULT 122
US-10-923-330-56/c
; Sequence 56, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBH02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; PRIOR FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 57
; LENGTH: 19
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
US-10-923-330-57
```

```
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 56
; LENGTH: 19
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
US-10-923-330-56

Query Match          4.2%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 82;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      338  CGAGGGCGAGGTTTCAGGCC 356
Db      19   CGAGGGCGAGGTTTCAGGCC 1

RESULT 123
US-10-923-330-57/c
; Sequence 57, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBH02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; PRIOR FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 57
; LENGTH: 19
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
US-10-923-330-57
```

```
Query Match          4.2%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 82;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      356  CTTTCAGGGCGCAGGAAGA 374
Db      19   CTTTCAGGGCGCAGGAAGA 1

RESULT 124
```

```
US-10-923-330-59/c
; Sequence 58, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; PRIOR FILING DATE: 2003-02-20
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 58
; LENGTH: 19
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
US-10-923-330-58

Query Match 4.2%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 82;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 374 AGGAACGGAGCGAGTCCCC 392
| | | | | | | | | | | | | | | | | |
Db 19 AGGAACGGAGCGAGTCCCC 1

RESULT 125
US-10-923-330-59/c
; Sequence 59, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; PRIOR FILING DATE: 2003-02-20
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 59
; LENGTH: 19
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
US-10-923-330-58

Query Match 4.2%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 82;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 374 AGGAACGGAGCGAGTCCCC 392
| | | | | | | | | | | | | | | | | |
Db 19 AGGAACGGAGCGAGTCCCC 1

RESULT 126
US-10-923-330-60/c
; Sequence 60, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; PRIOR FILING DATE: 2003-02-20
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 60
; LENGTH: 19
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
US-10-923-330-59
```

```
US-10-923-330-59/c
; Sequence 58, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; PRIOR FILING DATE: 2003-02-20
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 59
; LENGTH: 19
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
US-10-923-330-58

Query Match 4.2%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 82;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 392 CGCGCGCGCGGATTTCCC 410
| | | | | | | | | | | | | | | | | |
Db 19 CGCGCGCGCGGATTTCCC 1

RESULT 126
US-10-923-330-60/c
; Sequence 60, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; PRIOR FILING DATE: 2003-02-20
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 60
; LENGTH: 19
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
US-10-923-330-59
```

OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region  
US-10-923-330-60

Query Match 4.2%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 82;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 410 CTGAGCTGTGGGACGTGCA 428  
|||||  
Db 19 CTGAGCTGTGGGACGTGCA 1

## RESULT 127

US-10-923-330-61/c  
; Sequence 61, Application US/10923330  
; Publication No. US20050153916A1  
; GENERAL INFORMATION:  
; APPLICANT: Sirna Therapeutics, Inc.  
; APPLICANT: McSwiggen, James  
; APPLICANT: Beigelman, Leonid

; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene  
; FILE REFERENCE: 400/209 (MBH02-708-C)  
; CURRENT APPLICATION NUMBER: US/10/923,330

; PRIORITY FILING DATE: 2004-08-20  
; PRIOR APPLICATION NUMBER: PCT/US03/04088  
; PRIOR FILING DATE: 2004-05-24  
; PRIOR APPLICATION NUMBER: US 60/396,600

; PRIOR FILING DATE: 2002-07-17  
; PRIOR APPLICATION NUMBER: PCT/US04/16390  
; PRIOR FILING DATE: 2004-05-24  
; PRIOR APPLICATION NUMBER: US 10/826,966

; PRIOR FILING DATE: 2004-04-16  
; PRIOR APPLICATION NUMBER: US 10/757,803  
; PRIOR FILING DATE: 2004-01-14  
; PRIOR APPLICATION NUMBER: US 10/720,448

; PRIOR FILING DATE: 2003-11-24  
; PRIOR APPLICATION NUMBER: US 10/693,059  
; PRIOR FILING DATE: 2003-11-23  
; PRIOR APPLICATION NUMBER: US 10/444,853

; PRIOR FILING DATE: 2003-05-23  
; PRIOR APPLICATION NUMBER: PCT/US03/05346  
; PRIOR FILING DATE: 2003-02-20  
; PRIOR APPLICATION NUMBER: PCT/US03/05028

; PRIOR FILING DATE: 2003-02-20  
; Remaining Prior Application data removed - See File Wrapper or PALM.  
; NUMBER OF SEQ ID NOS: 768  
; SOFTWARE: PatentIn version 3.3

; SEQ ID NO 61  
; LENGTH: 19  
; TYPE: RNA  
; ORGANISM: Artificial Sequence  
; FEATURE:

OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region  
US-10-923-330-61

Query Match 4.2%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 82;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 428 ACCGAGCTCGGCTCACA 446  
|||||  
Db 19 ACCGAGCTCGGCTCACA 1

## RESULT 128

US-10-923-330-62/c  
; Sequence 62, Application US/10923330  
; Publication No. US20050153916A1  
; GENERAL INFORMATION:  
; APPLICANT: Sirna Therapeutics, Inc.  
; APPLICANT: McSwiggen, James  
; APPLICANT: Beigelman, Leonid

; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene  
; FILE REFERENCE: 400/209 (MBH02-708-C)  
; CURRENT APPLICATION NUMBER: US/10/923,330  
; PRIORITY FILING DATE: 2004-08-20  
; PRIOR APPLICATION NUMBER: PCT/US03/04088

; PRIOR FILING DATE: 2004-05-24  
; PRIOR APPLICATION NUMBER: US 60/396,600  
; PRIOR FILING DATE: 2002-07-17  
; PRIOR APPLICATION NUMBER: PCT/US04/16390

; PRIOR FILING DATE: 2004-05-24  
; PRIOR APPLICATION NUMBER: US 10/826,966  
; PRIOR FILING DATE: 2004-04-16  
; PRIOR APPLICATION NUMBER: US 10/757,803

; PRIOR FILING DATE: 2004-01-14  
; PRIOR APPLICATION NUMBER: US 10/720,448  
; PRIOR FILING DATE: 2003-11-24  
; PRIOR APPLICATION NUMBER: US 10/693,059

; PRIOR FILING DATE: 2003-11-23  
; PRIOR APPLICATION NUMBER: US 10/444,853  
; PRIOR FILING DATE: 2003-05-23  
; PRIOR APPLICATION NUMBER: PCT/US03/05346

; PRIOR FILING DATE: 2003-02-20  
; PRIOR APPLICATION NUMBER: PCT/US03/05028  
; Remaining Prior Application data removed - See File Wrapper or PALM.  
; NUMBER OF SEQ ID NOS: 768  
; SOFTWARE: PatentIn version 3.3

; SEQ ID NO 62  
; LENGTH: 19  
; TYPE: RNA  
; ORGANISM: Artificial Sequence  
; FEATURE:

OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region  
US-10-923-330-62

Query Match 4.2%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 82;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 431 CAGGACTCGGCTCACACAT 449  
|||||  
Db 19 CAGGACTCGGCTCACACAT 1

## RESULT 129

US-10-831-266-6  
; Sequence 6, Application US/10831266  
; Publication No. US20050003404A1  
; GENERAL INFORMATION:  
; APPLICANT: Rowley, Peter T.

; TITLE OF INVENTION: TELOMERASE INTERFERENCE  
; FILE REFERENCE: A-71506-1/RFT/THR  
; CURRENT APPLICATION NUMBER: US/10/831,266  
; CURRENT FILING DATE: 2004-04-22

; PRIOR APPLICATION NUMBER: PCT/US 02/33065  
; PRIOR FILING DATE: 2002-10-16  
; PRIOR APPLICATION NUMBER: US 60/345,326

; PRIOR FILING DATE: 2001-10-22  
; PRIOR APPLICATION NUMBER: US 60/359,196  
; PRIOR FILING DATE: 2002-02-20  
; PRIOR APPLICATION NUMBER: US 60/383,195

; PRIOR FILING DATE: 2002-05-22  
; NUMBER OF SEQ ID NOS: 17  
; SOFTWARE: PatentIn version 3.2  
; SEQ ID NO 6  
; LENGTH: 21  
; TYPE: DNA  
; ORGANISM: Artificial  
; FEATURE:

OTHER INFORMATION: oligonucleotide  
US-10-831-266-6



```
Query Match      4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 68.4%; Pred. No. 1e+02;
Matches 13; Conservative 6; Mismatches 0; Indels 0; Gaps 0;

QY 42 TTGTCTAACCCCTAACTGAG 60
Db 1 UUGUCUAAACCCCUAACUGAG 19

RESULT 130
US-10-831-266-7/c
; Sequence 7, Application US/10831266
; Publication No. US20050003404A1
; GENERAL INFORMATION:
; APPLICANT: Rowley, Peter T.
; TITLE OF INVENTION: TELOMERASE INTERFERENCE
; FILE REFERENCE: A-71506-1/RPT/THR
; CURRENT APPLICATION NUMBER: US/10/831,266
; CURRENT FILING DATE: 2004-04-22
; PRIOR APPLICATION NUMBER: PCT/US 02/33065
; PRIOR FILING DATE: 2002-10-16
; PRIOR FILING DATE: 2001-10-22
; PRIOR FILING DATE: 2001-10-22
; PRIOR FILING DATE: 2002-02-20
; PRIOR FILING DATE: 2002-05-22
; NUMBER OF SEQ ID NOS: 17
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 7
; LENGTH: 21
; TYPE: DNA
; ORGANISM: Artificial
; FEATURE:
; OTHER INFORMATION: oligonucleotide
US-10-831-266-7

Query Match      4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 42 TTGTCTAACCCCTAACTGAG 60
Db 19 TTGTCTAACCCCTAACTGAG 1

RESULT 131
US-10-831-266-8
; Sequence 8, Application US/10831266
; Publication No. US20050003404A1
; GENERAL INFORMATION:
; APPLICANT: Rowley, Peter T.
; TITLE OF INVENTION: TELOMERASE INTERFERENCE
; FILE REFERENCE: A-71506-1/RPT/THR
; CURRENT APPLICATION NUMBER: US/10/831,266
; CURRENT FILING DATE: 2004-04-22
; PRIOR APPLICATION NUMBER: PCT/US 02/33065
; PRIOR FILING DATE: 2002-10-16
; PRIOR FILING DATE: 2001-10-22
; PRIOR FILING DATE: 2001-10-22
; PRIOR FILING DATE: 2002-02-20
; PRIOR FILING DATE: 2002-05-22
; NUMBER OF SEQ ID NOS: 17
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 8
; LENGTH: 21
; TYPE: DNA
; ORGANISM: Artificial
; FEATURE:
; OTHER INFORMATION: oligonucleotide
US-10-831-266-8

Query Match      4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 68.4%; Pred. No. 1e+02;
Matches 13; Conservative 6; Mismatches 0; Indels 0; Gaps 0;

QY 42 TTGTCTAACCCCTAACTGAG 60
Db 1 UUGUCUAAACCCCUAACUGAG 19

RESULT 132
US-10-831-266-9/c
; Sequence 9, Application US/10831266
; Publication No. US20050003404A1
; GENERAL INFORMATION:
; APPLICANT: Rowley, Peter T.
; TITLE OF INVENTION: TELOMERASE INTERFERENCE
; FILE REFERENCE: A-71506-1/RPT/THR
; CURRENT APPLICATION NUMBER: US/10/831,266
; CURRENT FILING DATE: 2004-04-22
; PRIOR APPLICATION NUMBER: PCT/US 02/33065
; PRIOR FILING DATE: 2002-10-16
; PRIOR FILING DATE: 2001-10-22
; PRIOR FILING DATE: 2001-10-22
; PRIOR FILING DATE: 2002-02-20
; PRIOR FILING DATE: 2002-05-22
; NUMBER OF SEQ ID NOS: 17
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 9
; LENGTH: 21
; TYPE: DNA
; ORGANISM: Artificial
; FEATURE:
; OTHER INFORMATION: oligonucleotide
US-10-831-266-9

Query Match      4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 42 TTGTCTAACCCCTAACTGAG 60
Db 19 TTGTCTAACCCCTAACTGAG 1

RESULT 133
US-10-831-267-6
; Sequence 6, Application US/10831267
; Publication No. US20050009177A1
; GENERAL INFORMATION:
; APPLICANT: Rowley, Peter T.
; TITLE OF INVENTION: TELOMERASE INTERFERENCE
; FILE REFERENCE: A-71506-2/RPT/THR
; CURRENT APPLICATION NUMBER: US/10/831,267
; CURRENT FILING DATE: 2004-04-22
; PRIOR APPLICATION NUMBER: PCT/US 02/33146
; PRIOR FILING DATE: 2002-10-16
; PRIOR FILING DATE: 2001-10-22
; PRIOR FILING DATE: 2001-10-22
; PRIOR FILING DATE: 2002-02-20
; PRIOR FILING DATE: 2002-05-22
; NUMBER OF SEQ ID NOS: 23
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 6
; LENGTH: 21
; TYPE: DNA
; ORGANISM: Artificial
; FEATURE:
; OTHER INFORMATION: oligonucleotide
US-10-831-267-6
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RESULT 140
US-10-923-330-549
; Sequence 549, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBH02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 549
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siRNA sense region
; NAME/KEY: misc feature
; LOCATION: (20)..(21)
; OTHER INFORMATION: n stands for thymidine
US-10-923-330-549

Query Match          4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 73.7%; Pred. No. 1e+02;
Matches 14; Conservative 5; Mismatches 0; Indels 0; Gaps 0;

QY 148 CCACCGTTCATTCTAGAGC 166
|||||:|||||
Db 1 CCACCGUUAUUCUAGAGC 19

RESULT 141
US-10-923-330-550
; Sequence 550, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBH02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 549
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siRNA sense region
; NAME/KEY: misc feature
; LOCATION: (20)..(21)
; OTHER INFORMATION: n stands for thymidine
US-10-923-330-549

Query Match          4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 73.7%; Pred. No. 1e+02;
Matches 14; Conservative 5; Mismatches 0; Indels 0; Gaps 0;

QY 148 CCACCGTTCATTCTAGAGC 166
|||||:|||||
Db 1 CCACCGUUAUUCUAGAGC 19

RESULT 142
US-10-923-330-551
; Sequence 551, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBH02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
```

```

Query Match      4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 73.7%; Pred. No. 1e+02;
Matches 14; Conservative 5; Mismatches 0; Indels 0; Gaps 0;

QY      300 GAAGAGTTGGCTCTGTCA 318
      |||||:||||:|:|:|
DB       1 GAAGAGUUGGCGUCUGCA 19

RESULT 144
US-10-923-330-554/c
; Sequence 554, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; TITLE OF INVENTION: Expression Using Short Interfering RNA (siNA)
; FILE REFERENCE: 400/209 (MEHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: Patentin version 3.3
; SEQ ID NO 554
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense reg
;
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (20)..(21)
; OTHER INFORMATION: n stands for thymidine
US-10-923-330-554

Query Match      4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      145 CTTCACCGTTCATTCTAG 163
      |||||:|||||:|:|:|
DB       19 CTTCACCGTTCATTCTAG 1

RESULT 145
US-10-923-330-555/c
; Sequence 555, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.

```

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; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; TITLE OF INVENTION: Expression Using Short Interfering RNA (siRNA)
; FILE REFERENCE: 400/209 (MHB02-708-C)
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: US/10/923,330
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 555
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (20)..(21)
; OTHER INFORMATION: n stands for thymidine
US-10-923-330-555
```

```
Query Match 4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 146 TTCACCGTTCATTCTAGA 164
|||||
Db 19 TTCACCGTTCATTCTAGA 1

RESULT 146
US-10-923-330-556/c
; Sequence 556, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; TITLE OF INVENTION: Expression Using Short Interfering RNA (siRNA)
; FILE REFERENCE: 400/209 (MHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 555
; LENGTH: 21
```

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; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; PRIOR FILING DATE: 2003-02-20
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 556
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (20)..(21)
; OTHER INFORMATION: n stands for thymidine
US-10-923-330-556
```

```
Query Match 4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 147 TCCACCGTTCATTCTAGAG 165
|||||
Db 19 TCCACCGTTCATTCTAGAG 1
```

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RESULT 147
US-10-923-330-557/c
; Sequence 557, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; TITLE OF INVENTION: Expression Using Short Interfering RNA (siRNA)
; FILE REFERENCE: 400/209 (MHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 557
; LENGTH: 21
```

```
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
;
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (20)..(21)
; OTHER INFORMATION: n stands for thymidine
US-10-923-330-557

Query Match          4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 148 CCACCGTTCATTCTAGAGC 166
      ||||||||||||||||
DB 19 CCACCGTTCATTCTAGAGC 1

RESULT 148
US-10-923-330-558/c
; Sequence 558, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; TITLE OF INVENTION: Expression Using Short Interfering RNA (siNA)
; FILE REFERENCE: 400/209 (MBHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; PRIOR FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 558
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
;
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (20)..(21)
; OTHER INFORMATION: n stands for thymidine
US-10-923-330-558

Query Match          4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 149 CACCGTTCATTCTAGAGCA 167
      ||||||||||||||||
```

```
DB 19 CACCGTTCATTCTAGAGCA 1

RESULT 149
US-10-923-330-559/c
; Sequence 559, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; TITLE OF INVENTION: Expression Using Short Interfering RNA (siNA)
; FILE REFERENCE: 400/209 (MBHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; PRIOR FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 559
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
;
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (20)..(21)
; OTHER INFORMATION: n stands for thymidine
US-10-923-330-559

Query Match          4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 150 ACCGTTTCATTCTAGAGCA 168
      ||||||||||||||||
DB 19 ACCGTTTCATTCTAGAGCA 1

RESULT 150
US-10-923-330-560/c
; Sequence 560, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; TITLE OF INVENTION: Expression Using Short Interfering RNA (siNA)
; FILE REFERENCE: 400/209 (MBHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
```

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; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; PRIOR FILING DATE: 2003-02-20
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 560
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
; NAME/KEY: misc feature
; LOCATION: (20)..(21)
; OTHER INFORMATION: n stands for thymidine
; OTHER INFORMATION: n stands for thymidine
US-10-923-330-560

Query Match          4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 300 GAAGAGTGGGCTCTGTCA 318
    |||||
Db 19 GAAGAGTGGGCTCTGTCA 1

RESULT 151
US-10-923-330-562
; Sequence 562, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
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; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; PRIOR FILING DATE: 2003-02-20
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 562
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA sense region
; NAME/KEY: misc feature
; LOCATION: (1)..(1)
; OTHER INFORMATION: 5'-3' attached terminal deoxyabasic moiety
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (1)..(5)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (7)..(8)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (10)..(12)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (14)..(17)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (20)..(20)
; OTHER INFORMATION: n stands for thymidine
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (21)..(21)
; OTHER INFORMATION: 3'-3' attached terminal deoxyabasic moiety
US-10-923-330-562

Query Match          4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 63.2%; Pred. No. 1e+02;
Matches 12; Conservative 7; Mismatches 0; Indels 0; Gaps 0;

Qy 145 CTTCCACCGTTCATCTAG 163
    |::|||::|::|::|
Db 1 CUCCACCGUUAUUCUAG 19

RESULT 152
US-10-923-330-563
; Sequence 563, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
```



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; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; PRIOR FILING DATE: 2003-02-20
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 563
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA sense region
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (1)..(1)
; OTHER INFORMATION: 5'-3 attached terminal deoxyabasic moiety
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (1)..(4)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (6)..(7)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (9)..(11)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (13)..(16)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (20)..(20)
; OTHER INFORMATION: n stands for thymidine
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (21)..(21)
; OTHER INFORMATION: 3'-3 attached terminal deoxyabasic moiety
; US-10-923-330-563

Query Match 4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 63.2%; Pred. No. 1e+02;
Matches 12; Conservative 7; Mismatches 0; Indels 0; Gaps 0;

Qy 146 TTCACCGTTCATTCTAGA 164
:|||||:|||||
Db 1 UUCACCGUUCUUCUAGA 19

RESULT 153
US-10-923-330-564
; Sequence 564, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923.330
; CURRENT FILING DATE: 2004-08-20
```

```
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; PRIOR FILING DATE: 2003-02-20
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 564
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA sense region
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (1)..(1)
; OTHER INFORMATION: 5'-3 attached terminal deoxyabasic moiety
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (1)..(3)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (5)..(6)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (8)..(10)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (12)..(15)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (20)..(20)
; OTHER INFORMATION: n stands for thymidine
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (21)..(21)
; OTHER INFORMATION: 3'-3 attached terminal deoxyabasic moiety
; US-10-923-330-564

Query Match 4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 68.4%; Pred. No. 1e+02;
Matches 13; Conservative 6; Mismatches 0; Indels 0; Gaps 0;

Qy 147 TCCACCGTTCATTCTAGAG 165
:|||||:|||||
Db 1 UCCACCGUUCUUCUAGAG 19

RESULT 154
US-10-923-330-565
; Sequence 565, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
```

```
/ APPLICANT: Sirna Therapeutics, Inc.
/ APPLICANT: McSwiggen, James
/ APPLICANT: Beigelman, Leonid
/ TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
/ FILE REFERENCE: 400/209 (MEHB02-708-C)
/ CURRENT APPLICATION NUMBER: US/10/923,330
/ PRIOR FILING DATE: 2004-08-20
/ PRIOR APPLICATION NUMBER: PCT/US03/04088
/ PRIOR FILING DATE: 2004-05-24
/ PRIOR APPLICATION NUMBER: US 60/396,600
/ PRIOR FILING DATE: 2002-07-17
/ PRIOR APPLICATION NUMBER: PCT/US04/16390
/ PRIOR FILING DATE: 2004-05-24
/ PRIOR APPLICATION NUMBER: US 10/826,966
/ PRIOR FILING DATE: 2004-04-16
/ PRIOR APPLICATION NUMBER: US 10/757,803
/ PRIOR FILING DATE: 2004-01-14
/ PRIOR APPLICATION NUMBER: US 10/720,448
/ PRIOR FILING DATE: 2003-11-24
/ PRIOR APPLICATION NUMBER: US 10/693,059
/ PRIOR FILING DATE: 2003-11-23
/ PRIOR APPLICATION NUMBER: US 10/444,853
/ PRIOR FILING DATE: 2003-05-23
/ PRIOR APPLICATION NUMBER: PCT/US03/05346
/ PRIOR FILING DATE: 2003-02-20
/ PRIOR APPLICATION NUMBER: PCT/US03/05028
/ Remaining Prior Application data removed - See File Wrapper or PALM.
/ NUMBER OF SEQ ID NOS: 768
/ SOFTWARE: PatentIn version 3.3
/ SEQ ID NO 565
/ LENGTH: 21
/ TYPE: RNA
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: Description of Artificial Sequence: siNA sense region
/ NAME/KEY: misc feature
/ LOCATION: (1)..(1)
/ FEATURE:
/ NAME/KEY: misc feature
/ LOCATION: (1)..(2)
/ OTHER INFORMATION: 2'-deoxy-2'-fluoro
/ FEATURE:
/ NAME/KEY: misc feature
/ LOCATION: (4)..(5)
/ OTHER INFORMATION: 2'-deoxy-2'-fluoro
/ FEATURE:
/ NAME/KEY: misc feature
/ LOCATION: (7)..(9)
/ OTHER INFORMATION: 2'-deoxy-2'-fluoro
/ FEATURE:
/ NAME/KEY: misc feature
/ LOCATION: (11)..(14)
/ OTHER INFORMATION: 2'-deoxy-2'-fluoro
/ FEATURE:
/ NAME/KEY: misc feature
/ LOCATION: (19)..(19)
/ OTHER INFORMATION: 2'-deoxy-2'-fluoro
/ FEATURE:
/ NAME/KEY: misc feature
/ LOCATION: (20)..(20)
/ OTHER INFORMATION: n stands for thymidine
/ FEATURE:
/ NAME/KEY: misc feature
/ LOCATION: (21)..(21)
/ OTHER INFORMATION: 3'-3 attached terminal deoxyabasic moiety
US-10-923-330-565
```

Query Match 4.2%; Score 19; DB 1; Length 21;  
Best Local Similarity 73.7%; Pred. No. 1e+02;

```
Matches 14; Conservative 5; Mismatches 0; Indels 0; Gaps 0;
Qy 148 CCACGGTTCATTCTAGAGC 166
| | | | | : | | | | |
Db 1 CCACCGUUCAUUCUAGAGC 19

RESULT 155
US-10-923-330-566
/ Sequence 566, Application US/10923330
/ Publication No. US20050153916A1
/ GENERAL INFORMATION:
/ APPLICANT: Sirna Therapeutics, Inc.
/ APPLICANT: McSwiggen, James
/ APPLICANT: Beigelman, Leonid
/ TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
/ FILE REFERENCE: 400/209 (MEHB02-708-C)
/ CURRENT APPLICATION NUMBER: US/10/923,330
/ CURRENT FILING DATE: 2004-08-20
/ PRIOR APPLICATION NUMBER: PCT/US03/04088
/ PRIOR FILING DATE: 2004-05-24
/ PRIOR APPLICATION NUMBER: US 60/396,600
/ PRIOR FILING DATE: 2002-07-17
/ PRIOR APPLICATION NUMBER: PCT/US04/16390
/ PRIOR FILING DATE: 2004-05-24
/ PRIOR APPLICATION NUMBER: US 10/826,966
/ PRIOR FILING DATE: 2004-04-16
/ PRIOR APPLICATION NUMBER: US 10/757,803
/ PRIOR FILING DATE: 2004-01-14
/ PRIOR APPLICATION NUMBER: US 10/720,448
/ PRIOR FILING DATE: 2003-11-24
/ PRIOR APPLICATION NUMBER: US 10/693,059
/ PRIOR FILING DATE: 2003-11-23
/ PRIOR APPLICATION NUMBER: US 10/444,853
/ PRIOR FILING DATE: 2003-05-23
/ PRIOR APPLICATION NUMBER: PCT/US03/05346
/ PRIOR FILING DATE: 2003-02-20
/ PRIOR APPLICATION NUMBER: PCT/US03/05028
/ Remaining Prior Application data removed - See File Wrapper or PALM.
/ NUMBER OF SEQ ID NOS: 768
/ SOFTWARE: PatentIn version 3.3
/ SEQ ID NO 566
/ LENGTH: 21
/ TYPE: RNA
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: Description of Artificial Sequence: siNA sense region
/ NAME/KEY: misc feature
/ LOCATION: (1)..(1)
/ OTHER INFORMATION: 5'-3 attached terminal deoxyabasic moiety
/ FEATURE:
/ NAME/KEY: misc feature
/ LOCATION: (1)..(1)
/ OTHER INFORMATION: 2'-deoxy-2'-fluoro
/ FEATURE:
/ NAME/KEY: misc feature
/ LOCATION: (3)..(4)
/ OTHER INFORMATION: 2'-deoxy-2'-fluoro
/ FEATURE:
/ NAME/KEY: misc feature
/ LOCATION: (6)..(8)
/ OTHER INFORMATION: 2'-deoxy-2'-fluoro
/ FEATURE:
/ NAME/KEY: misc feature
/ LOCATION: (10)..(13)
/ OTHER INFORMATION: 2'-deoxy-2'-fluoro
/ FEATURE:
/ NAME/KEY: misc feature
/ LOCATION: (18)..(18)
/ OTHER INFORMATION: 2'-deoxy-2'-fluoro
```

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;/ FEATURE:
;/ NAME/KEY: misc_feature
;/ LOCATION: (20)..(20)
;/ OTHER INFORMATION: n stands for thymidine
;/ FEATURE:
;/ NAME/KEY: misc_feature
;/ LOCATION: (21)..(21)
;/ OTHER INFORMATION: 3'-3 attached terminal deoxyabasic moiety
US-10-923-330-566
```

```
Query Match          4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 73.7%; Pred. No. 1e+02;
Matches 14; Conservative 5; Mismatches 0; Indels 0; Gaps 0;
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```
Qy 149 CACGCTTCATTCTAGACGA 167
      |||||:|:|:|:|:|:|
Db 1 CACGUUUAUUCUAGACGA 19
```

```
RESULT 156
US-10-923-330-567
; Sequence 567, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBH02-708-C)
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: US/10/923,330
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 567
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
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;/ FEATURE:
;/ NAME/KEY: misc_feature
;/ LOCATION: (2)..(3)
;/ OTHER INFORMATION: 2'-deoxy-2'-fluoro
;/ FEATURE:
;/ NAME/KEY: misc_feature
;/ LOCATION: (5)..(7)
;/ OTHER INFORMATION: 2'-deoxy-2'-fluoro
```

```
;/ FEATURE:
;/ NAME/KEY: misc_feature
;/ LOCATION: (9)..(12)
;/ OTHER INFORMATION: 2'-deoxy-2'-fluoro
;/ FEATURE:
;/ NAME/KEY: misc_feature
;/ LOCATION: (17)..(17)
;/ OTHER INFORMATION: 2'-deoxy-2'-fluoro
;/ FEATURE:
;/ NAME/KEY: misc_feature
;/ LOCATION: (20)..(20)
;/ OTHER INFORMATION: n stands for thymidine
;/ FEATURE:
;/ NAME/KEY: misc_feature
;/ LOCATION: (21)..(21)
;/ OTHER INFORMATION: 3'-3 attached terminal deoxyabasic moiety
US-10-923-330-567
```

```
Query Match          4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 73.7%; Pred. No. 1e+02;
Matches 14; Conservative 5; Mismatches 0; Indels 0; Gaps 0;
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```
Qy 150 ACCGTTTCATTCTAGACAA 168
      |||||:|:|:|:|:|:|
Db 1 ACCGUUUAUUCUAGACGA 19
```

```
RESULT 157
US-10-923-330-568
; Sequence 568, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBH02-708-C)
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 568
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
```

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;/ FEATURE:
;/ NAME/KEY: misc_feature
;/ LOCATION: (2)..(3)
;/ OTHER INFORMATION: 2'-deoxy-2'-fluoro
;/ FEATURE:
;/ NAME/KEY: misc_feature
;/ LOCATION: (5)..(7)
;/ OTHER INFORMATION: 2'-deoxy-2'-fluoro
```

```
;/ FEATURE:
;/ NAME/KEY: misc_feature
;/ LOCATION: (9)..(12)
;/ OTHER INFORMATION: 2'-deoxy-2'-fluoro
;/ FEATURE:
;/ NAME/KEY: misc_feature
;/ LOCATION: (17)..(17)
;/ OTHER INFORMATION: 2'-deoxy-2'-fluoro
;/ FEATURE:
;/ NAME/KEY: misc_feature
;/ LOCATION: (20)..(20)
;/ OTHER INFORMATION: n stands for thymidine
;/ FEATURE:
;/ NAME/KEY: misc_feature
;/ LOCATION: (21)..(21)
;/ OTHER INFORMATION: 3'-3 attached terminal deoxyabasic moiety
US-10-923-330-567
```

```
Query Match          4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 73.7%; Pred. No. 1e+02;
Matches 14; Conservative 5; Mismatches 0; Indels 0; Gaps 0;
```

```
Qy 150 ACCGTTTCATTCTAGACAA 168
      |||||:|:~:~:~:~:~:~
Db 1 ACCGUUUAUUCUAGACGA 19
```

```
RESULT 157
US-10-923-330-568
; Sequence 568, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBH02-708-C)
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 568
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
```

```
;/ FEATURE:
;/ NAME/KEY: misc_feature
;/ LOCATION: (2)..(3)
;/ OTHER INFORMATION: 2'-deoxy-2'-fluoro
;/ FEATURE:
;/ NAME/KEY: misc_feature
;/ LOCATION: (1)..(1)
;/ OTHER INFORMATION: 5'-3 attached terminal deoxyabasic moiety
```

```
;/ FEATURE:
;/ NAME/KEY: misc_feature
;/ LOCATION: (9)..(12)
;/ OTHER INFORMATION: 2'-deoxy-2'-fluoro
;/ FEATURE:
;/ NAME/KEY: misc_feature
;/ LOCATION: (17)..(17)
;/ OTHER INFORMATION: 2'-deoxy-2'-fluoro
;/ FEATURE:
;/ NAME/KEY: misc_feature
;/ LOCATION: (20)..(20)
;/ OTHER INFORMATION: n stands for thymidine
;/ FEATURE:
;/ NAME/KEY: misc_feature
;/ LOCATION: (21)..(21)
;/ OTHER INFORMATION: 3'-3 attached terminal deoxyabasic moiety
US-10-923-330-567
```

```
Query Match          4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 73.7%; Pred. No. 1e+02;
Matches 14; Conservative 5; Mismatches 0; Indels 0; Gaps 0;
```

```
Qy 150 ACCGTTTCATTCTAGACAA 168
      |||||:~:~:~:~:~:~
Db 1 ACCGUUUAUUCUAGACGA 19
```

```
RESULT 157
US-10-923-330-568
; Sequence 568, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBH02-708-C)
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 568
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
```

```
;/
; NAME/KEY: misc feature
; LOCATION: (7)..(8)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (12)..(15)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (17)..(18)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (20)..(20)
; OTHER INFORMATION: n stands for thymidine
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (21)..(21)
; OTHER INFORMATION: 3'-3 attached terminal deoxyabasic moiety
US-10-923-330-568
```

```
Query Match          4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 73.7%; Pred. No. 1e+02;
Matches 14; Conservative 5; Mismatches 0; Indels 0; Gaps 0;
```

```
Qy      300 GAAGAGTTGGGCTCTGTCA 318
      |||||:|||||:|:|:|
Db       1 GAAGAGUUGGCUCUGUCA 19
```

```
RESULT 158
US-10-923-330-570/c
; Sequence 570, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; PRIOR FILING DATE: 2003-02-20
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 570
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
```

```
;/
; NAME/KEY: misc feature
; LOCATION: (1)..(2)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (7)..(7)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (11)..(11)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (14)..(14)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (20)..(20)
; OTHER INFORMATION: Phosphorothioate 3'-Internucleotide Linkage
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (21)..(21)
; OTHER INFORMATION: n stands for thymidine
US-10-923-330-570
```

```
Query Match          4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
Qy      145 CTTCCACCGTTCATTCTAG 163
      |||||:|||||:|:|:|
Db       19 CTTCCACCGTTCATTCTAG 1
```

```
RESULT 159
US-10-923-330-571/c
; Sequence 571, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; PRIOR FILING DATE: 2003-02-20
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 571
; LENGTH: 21
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; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
; NAME/KEY: misc_feature
; LOCATION: (1)..(3)
; FEATURE:
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; NAME/KEY: misc_feature
; LOCATION: (8)..(8)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (12)..(12)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (15)..(15)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (20)..(20)
; OTHER INFORMATION: Phosphorothioate 3'-Internucleotide Linkage
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (21)..(21)
; OTHER INFORMATION: n stands for thymidine
US-10-923-330-571
```

Query Match 4.2%; Score 19; DB 1; Length 21;  
Best Local Similarity 100.0%; Pred. No. 1e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy 146 TTCACCGTTCATCTCTAGA 164
Db 19 TTCACCGTTCATCTCTAGA 1
```

```
RESULT 160
US-10-923-330-572/c
; Sequence 572, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: McSwiggen, James
; APPLICANT: Sirna Therapeutics, Inc.
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; PRIOR FILING DATE: 2003-02-20
; Remaining Prior Application data removed - See File Wrapper or PALM.
```

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; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 572
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
; NAME/KEY: misc_feature
; LOCATION: (1)..(4)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (9)..(9)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (13)..(13)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (16)..(16)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (20)..(20)
; OTHER INFORMATION: Phosphorothioate 3'-Internucleotide Linkage
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (21)..(21)
; OTHER INFORMATION: n stands for thymidine
US-10-923-330-572
```

Query Match 4.2%; Score 19; DB 1; Length 21;  
Best Local Similarity 100.0%; Pred. No. 1e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy 147 TCCACCGTTCATCTCTAGAG 165
Db 19 TCCACCGTTCATCTCTAGAG 1
```

```
RESULT 161
US-10-923-330-573/c
; Sequence 573, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
```

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/ PRIOR FILING DATE: 2003-02-20
/ PRIOR APPLICATION NUMBER: PCT/US03/05028
/ PRIOR FILING DATE: 2003-02-20
/ Remaining Prior Application data removed - See File Wrapper or PALM.
/ NUMBER OF SEQ ID NOS: 768
/ SOFTWARE: PatentIn version 3.3
/ SEQ ID NO 573
/ LENGTH: 21
/ TYPE: RNA
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
/ FEATURE:
/ NAME/KEY: misc_feature
/ LOCATION: (2)..(5)
/ OTHER INFORMATION: 2'-deoxy-2'-fluoro
/ FEATURE:
/ NAME/KEY: misc_feature
/ LOCATION: (10)..(10)
/ OTHER INFORMATION: 2'-deoxy-2'-fluoro
/ FEATURE:
/ NAME/KEY: misc_feature
/ LOCATION: (14)..(14)
/ OTHER INFORMATION: 2'-deoxy-2'-fluoro
/ FEATURE:
/ NAME/KEY: misc_feature
/ LOCATION: (17)..(17)
/ OTHER INFORMATION: 2'-deoxy-2'-fluoro
/ FEATURE:
/ NAME/KEY: misc_feature
/ LOCATION: (20)..(20)
/ OTHER INFORMATION: Phosphorothioate 3'-Internucleotide Linkage
/ FEATURE:
/ NAME/KEY: misc_feature
/ LOCATION: (21)..(21)
/ OTHER INFORMATION: n stands for thymidine
US-10-923-330-573
```

```
Query Match 4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
Qy 148 CCACGGTTCATTCTAGAGC 166
|||||
Db 19 CCACGGTTCATTCTAGAGC 1
```

```
RESULT 162
US-10-923-330-574/c
/ Sequence 574, Application US/10923330
/ Publication No. US20050153916A1
/ GENERAL INFORMATION:
/ APPLICANT: Sirna Therapeutics, Inc.
/ APPLICANT: McSwiggen, James
/ APPLICANT: Beigelman, Leonid
/ TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
/ FILE REFERENCE: 400/209 (MEH02-708-C)
/ CURRENT APPLICATION NUMBER: US/10/923,330
/ CURRENT FILING DATE: 2004-08-20
/ PRIOR APPLICATION NUMBER: PCT/US03/04088
/ PRIOR FILING DATE: 2004-05-24
/ PRIOR APPLICATION NUMBER: US 60/396,600
/ PRIOR FILING DATE: 2002-07-17
/ PRIOR APPLICATION NUMBER: PCT/US04/16390
/ PRIOR FILING DATE: 2004-05-24
/ PRIOR APPLICATION NUMBER: US 10/826,966
/ PRIOR FILING DATE: 2004-04-16
/ PRIOR APPLICATION NUMBER: US 10/757,803
/ PRIOR FILING DATE: 2004-01-14
/ PRIOR APPLICATION NUMBER: US 10/720,448
/ PRIOR FILING DATE: 2003-11-24
/ PRIOR APPLICATION NUMBER: US 10/693,059
```

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/ PRIOR FILING DATE: 2003-11-23
/ PRIOR APPLICATION NUMBER: US 10/444,853
/ PRIOR FILING DATE: 2003-05-23
/ PRIOR APPLICATION NUMBER: PCT/US03/05346
/ PRIOR FILING DATE: 2003-02-20
/ PRIOR APPLICATION NUMBER: PCT/US03/05028
/ PRIOR FILING DATE: 2003-02-20
/ Remaining Prior Application data removed - See File Wrapper or PALM.
/ NUMBER OF SEQ ID NOS: 768
/ SOFTWARE: PatentIn version 3.3
/ SEQ ID NO 574
/ LENGTH: 21
/ TYPE: RNA
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
/ FEATURE:
/ NAME/KEY: misc_feature
/ LOCATION: (1)..(1)
/ OTHER INFORMATION: 2'-deoxy-2'-fluoro
/ FEATURE:
/ NAME/KEY: misc_feature
/ LOCATION: (3)..(6)
/ OTHER INFORMATION: 2'-deoxy-2'-fluoro
/ FEATURE:
/ NAME/KEY: misc_feature
/ LOCATION: (11)..(11)
/ OTHER INFORMATION: 2'-deoxy-2'-fluoro
/ FEATURE:
/ NAME/KEY: misc_feature
/ LOCATION: (15)..(15)
/ OTHER INFORMATION: 2'-deoxy-2'-fluoro
/ FEATURE:
/ NAME/KEY: misc_feature
/ LOCATION: (18)..(18)
/ OTHER INFORMATION: 2'-deoxy-2'-fluoro
/ FEATURE:
/ NAME/KEY: misc_feature
/ LOCATION: (20)..(20)
/ OTHER INFORMATION: Phosphorothioate 3'-Internucleotide Linkage
/ FEATURE:
/ NAME/KEY: misc_feature
/ LOCATION: (21)..(21)
/ OTHER INFORMATION: n stands for thymidine
US-10-923-330-574
```

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Query Match 4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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Qy 149 CACCGTTCATTCTAGAGCA 167
|||||
Db 19 CACCGTTCATTCTAGAGCA 1
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RESULT 163
US-10-923-330-575/c
/ Sequence 575, Application US/10923330
/ Publication No. US20050153916A1
/ GENERAL INFORMATION:
/ APPLICANT: Sirna Therapeutics, Inc.
/ APPLICANT: McSwiggen, James
/ APPLICANT: Beigelman, Leonid
/ TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
/ FILE REFERENCE: 400/209 (MEH02-708-C)
/ CURRENT APPLICATION NUMBER: US/10/923,330
/ CURRENT FILING DATE: 2004-08-20
/ PRIOR APPLICATION NUMBER: PCT/US03/04088
/ PRIOR FILING DATE: 2004-05-24
/ PRIOR APPLICATION NUMBER: US 60/396,600
/ PRIOR FILING DATE: 2002-07-17
/ PRIOR APPLICATION NUMBER: PCT/US04/16390
```

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; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 575
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (1)..(2)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (4)..(7)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (12)..(12)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (16)..(16)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (19)..(19)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (20)..(20)
; OTHER INFORMATION: Phosphorothioate 3'-Internucleotide Linkage
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (21)..(21)
; OTHER INFORMATION: n stands for thymidine
US-10-923-330-575

Query Match 4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 150 ACCGTTCTTCTAGCAA 168
Db 19 ACCGTTCTTCTAGCAA 1

RESULT 164
US-10-923-330-576/c
; Sequence 576, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; TITLE OF INVENTION: Expression Using Short Interfering RNA (siNA)
```

```
; FILE REFERENCE: 400/209 (MBHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 576
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (1)..(1)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (4)..(4)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (9)..(11)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (14)..(19)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (20)..(20)
; OTHER INFORMATION: Phosphorothioate 3'-Internucleotide Linkage
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (21)..(21)
; OTHER INFORMATION: n stands for thymidine
US-10-923-330-576

Query Match 4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 300 GAAGAGTTGGGCTCTGTCA 318
Db 19 GAAGAGTTGGGCTCTGTCA 1

RESULT 165
US-10-923-330-578
; Sequence 578, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
```

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; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; TITLE OF INVENTION: Expression Using Short Interfering RNA (siRNA)
; FILE REFERENCE: 400/209 (MBH02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 578
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA sense region
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (1)..(1)
; OTHER INFORMATION: 5'-3 attached terminal deoxyabasic moiety
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (1)..(5)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (6)..(6)
; OTHER INFORMATION: 2'-deoxy
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (7)..(8)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (9)..(9)
; OTHER INFORMATION: 2'-deoxy
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (10)..(12)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (13)..(13)
; OTHER INFORMATION: 2'-deoxy
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (14)..(17)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (18)..(19)
; OTHER INFORMATION: 2'-deoxy
; FEATURE:
```

```
; NAME/KEY: misc_feature
; LOCATION: (20)..(20)
; OTHER INFORMATION: n stands for thymidine
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (21)..(21)
; OTHER INFORMATION: 3'-3 attached terminal deoxyabasic moiety
US-10-923-330-578
```

```
Query Match 4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 63.2%; Pred. No. 1e+02;
Matches 12; Conservative 7; Mismatches 0; Indels 0; Gaps 0;
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Qy 145 CTTCGACCGTTCATCTAG 163
   |||||:|:|:|:|:|:|:|:|:|
Db 1 CUUCCACCGUUAUUCUAG 19
```

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RESULT 166
US-10-923-330-579
; Sequence 579, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; TITLE OF INVENTION: Expression Using Short Interfering RNA (siNA)
; FILE REFERENCE: 400/209 (MBH02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 579
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA sense region
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (1)..(1)
; OTHER INFORMATION: 5'-3 attached terminal deoxyabasic moiety
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (1)..(4)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (5)..(5)
; OTHER INFORMATION: 2'-deoxy
; FEATURE:
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```
; NAME/KEY: misc_feature
; LOCATION: (6)..(7)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (8)..(8)
; OTHER INFORMATION: 2'-deoxy
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (9)..(11)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (12)..(12)
; OTHER INFORMATION: 2'-deoxy
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (13)..(16)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (17)..(19)
; OTHER INFORMATION: 2'-deoxy
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (20)..(20)
; OTHER INFORMATION: n stands for thymidine
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (21)..(21)
; OTHER INFORMATION: 3'-3 attached terminal deoxyabasic moiety
; US-10-923-330-579

Query Match          4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 63.2%; Pred. No. 1e+02;
Matches 12; Conservative 7; Mismatches 0; Indels 0; Gaps 0;

Qy 146 TTCCACCGTTCATTCTAG 164
Db 1 UCCACCGUUCAUUCUAG 19

RESULT 167
US-10-923-330-580
; Sequence 580, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20

; NAME/KEY: misc_feature
; LOCATION: (6)..(7)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (8)..(8)
; OTHER INFORMATION: 2'-deoxy
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (9)..(11)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (12)..(12)
; OTHER INFORMATION: 2'-deoxy
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (13)..(16)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (17)..(19)
; OTHER INFORMATION: 2'-deoxy
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (20)..(20)
; OTHER INFORMATION: n stands for thymidine
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (21)..(21)
; OTHER INFORMATION: 3'-3 attached terminal deoxyabasic moiety
; US-10-923-330-580

Query Match          4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 68.4%; Pred. No. 1e+02;
Matches 13; Conservative 6; Mismatches 0; Indels 0; Gaps 0;

Qy 147 TCCACCGTTCATTCTAG 165
Db 1 UCCACCGUUCAUUCUAG 19

RESULT 168
US-10-923-330-581
; Sequence 581, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
```

```
/ APPLICANT: Beigelman, Leonid
/ TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
/ FILE REFERENCE: Expression Using Short Interfering RNA (siNA)
/ CURRENT APPLICATION NUMBER: US10/923,330
/ CURRENT FILING DATE: 2004-08-20
/ PRIOR APPLICATION NUMBER: PCT/US03/04088
/ PRIOR FILING DATE: 2004-05-24
/ PRIOR APPLICATION NUMBER: US 60/396,600
/ PRIOR FILING DATE: 2002-07-17
/ PRIOR APPLICATION NUMBER: PCT/US04/16390
/ PRIOR FILING DATE: 2004-05-24
/ PRIOR APPLICATION NUMBER: US 10/826,966
/ PRIOR FILING DATE: 2004-04-16
/ PRIOR APPLICATION NUMBER: US 10/757,803
/ PRIOR FILING DATE: 2004-01-14
/ PRIOR APPLICATION NUMBER: US 10/720,448
/ PRIOR FILING DATE: 2003-11-24
/ PRIOR APPLICATION NUMBER: US 10/693,059
/ PRIOR FILING DATE: 2003-11-23
/ PRIOR APPLICATION NUMBER: US 10/444,853
/ PRIOR FILING DATE: 2003-05-23
/ PRIOR APPLICATION NUMBER: PCT/US03/05346
/ PRIOR FILING DATE: 2003-02-20
/ PRIOR APPLICATION NUMBER: PCT/US03/05028
/ PRIOR FILING DATE: 2003-02-20
/ Remaining Prior Application data removed - See File Wrapper or PALM.
/ NUMBER OF SEQ ID NOS: 768
/ SOFTWARE: PatentIn version 3.3
/ SEQ ID NO 581
/ LENGTH: 21
/ TYPE: RNA
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: Description of Artificial Sequence: siNA sense region
/ FEATURE:
/ NAME/KEY: misc_feature
/ LOCATION: (1)..(1)
/ OTHER INFORMATION: 5'-3 attached terminal deoxyabasic moiety
/ FEATURE:
/ NAME/KEY: misc_feature
/ LOCATION: (1)..(2)
/ OTHER INFORMATION: 2'-deoxy-2'-fluoro
/ FEATURE:
/ NAME/KEY: misc_feature
/ LOCATION: (3)..(3)
/ OTHER INFORMATION: 2'-deoxy
/ FEATURE:
/ NAME/KEY: misc_feature
/ LOCATION: (4)..(5)
/ OTHER INFORMATION: 2'-deoxy-2'-fluoro
/ FEATURE:
/ NAME/KEY: misc_feature
/ LOCATION: (6)..(6)
/ OTHER INFORMATION: 2'-deoxy
/ FEATURE:
/ NAME/KEY: misc_feature
/ LOCATION: (7)..(9)
/ OTHER INFORMATION: 2'-deoxy-2'-fluoro
/ FEATURE:
/ NAME/KEY: misc_feature
/ LOCATION: (10)..(10)
/ OTHER INFORMATION: 2'-deoxy
/ FEATURE:
/ NAME/KEY: misc_feature
/ LOCATION: (11)..(14)
/ OTHER INFORMATION: 2'-deoxy-2'-fluoro
/ FEATURE:
/ NAME/KEY: misc_feature
/ LOCATION: (15)..(18)
/ OTHER INFORMATION: 2'-deoxy
/ FEATURE:
/ NAME/KEY: misc_feature
```

```
/ LOCATION: (19)..(19)
/ OTHER INFORMATION: 2'-deoxy-2'-fluoro
/ FEATURE:
/ NAME/KEY: misc_feature
/ LOCATION: (20)..(20)
/ OTHER INFORMATION: n stands for thymidine
/ FEATURE:
/ NAME/KEY: misc_feature
/ LOCATION: (21)..(21)
/ OTHER INFORMATION: 3'-3 attached terminal deoxyabasic moiety
US-10-923-330-581
```

```
Query Match 4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 73.7%; Pred. No. 1e+02;
Matches 14; Conservative 5; Mismatches 0; Indels 0; Gaps 0;
```

```
Qy 148 CCACCGTCATCTTAGAGC 166
|||||:|:|:|:|:|
Db 1 CCACCGUUCUUCUAGAGC 19
```

```
RESULT 169
US-10-923-330-582
/ Sequence 582, Application US/10923330
/ Publication No. US20050153916A1
/ GENERAL INFORMATION:
/ APPLICANT: Sirna Therapeutics, Inc.
/ APPLICANT: McSwiggen, James
/ APPLICANT: Beigelman, Leonid
/ TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
/ FILE REFERENCE: 400/209 (MBH02-708-C)
/ CURRENT APPLICATION NUMBER: US/10/923,330
/ CURRENT FILING DATE: 2004-08-20
/ PRIOR APPLICATION NUMBER: PCT/US03/04088
/ PRIOR FILING DATE: 2004-05-24
/ PRIOR APPLICATION NUMBER: US 60/396,600
/ PRIOR FILING DATE: 2002-07-17
/ PRIOR APPLICATION NUMBER: PCT/US04/16390
/ PRIOR FILING DATE: 2004-05-24
/ PRIOR APPLICATION NUMBER: US 10/826,966
/ PRIOR FILING DATE: 2004-04-16
/ PRIOR APPLICATION NUMBER: US 10/757,803
/ PRIOR FILING DATE: 2004-01-14
/ PRIOR APPLICATION NUMBER: US 10/720,448
/ PRIOR FILING DATE: 2003-11-24
/ PRIOR APPLICATION NUMBER: US 10/693,059
/ PRIOR FILING DATE: 2003-11-23
/ PRIOR APPLICATION NUMBER: US 10/444,853
/ PRIOR FILING DATE: 2003-05-23
/ PRIOR APPLICATION NUMBER: PCT/US03/05346
/ PRIOR FILING DATE: 2003-02-20
/ PRIOR APPLICATION NUMBER: PCT/US03/05028
/ Remaining Prior Application data removed - See File Wrapper or PALM.
/ NUMBER OF SEQ ID NOS: 768
/ SOFTWARE: PatentIn version 3.3
/ SEQ ID NO 582
/ LENGTH: 21
/ TYPE: RNA
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: Description of Artificial Sequence: siNA sense region
/ FEATURE:
/ NAME/KEY: misc_feature
/ LOCATION: (1)..(1)
/ OTHER INFORMATION: 5'-3 attached terminal deoxyabasic moiety
/ FEATURE:
/ NAME/KEY: misc_feature
/ LOCATION: (1)..(1)
/ OTHER INFORMATION: 2'-deoxy-2'-fluoro
/ FEATURE:
/ NAME/KEY: misc_feature
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; LOCATION: (2)..(2)
; OTHER INFORMATION: 2'-deoxy
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (3)..(4)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (5)..(5)
; OTHER INFORMATION: 2'-deoxy
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (6)..(8)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (9)..(9)
; OTHER INFORMATION: 2'-deoxy
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (10)..(13)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (14)..(17)
; OTHER INFORMATION: 2'-deoxy
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (18)..(18)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (19)..(19)
; OTHER INFORMATION: 2'-deoxy
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (20)..(20)
; OTHER INFORMATION: n stands for thymidine
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (21)..(21)
; OTHER INFORMATION: 3'-3 attached terminal deoxyabasic moiety
US-10-923-330-582
```

```
Query Match 4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 73.7%; Pred. No. 1e+02;
Matches 14; Conservative 5; Mismatches 0; Indels 0; Gaps 0;
```

```
Qy 149 CACGTTTCATTCTAGAGCA 167
|||||:|:|:|:|:|:|:|:|:|
Db 1 CACCGUUCUUCUAGAGCA 19
```

## RESULT 170

```
US-10-923-330-583
; Sequence 583, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: McSwiggen, James
; APPLICANT: McSwiggen, James
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBH02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
```

```
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; PRIOR FILING DATE: 2003-02-20
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 583
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: s1NA sense region
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (1)..(1)
; OTHER INFORMATION: 5'-3 attached terminal deoxyabasic moiety
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (1)..(1)
; OTHER INFORMATION: 2'-deoxy
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (2)..(3)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (4)..(4)
; OTHER INFORMATION: 2'-deoxy
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (5)..(7)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (8)..(8)
; OTHER INFORMATION: 2'-deoxy
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (9)..(12)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (13)..(16)
; OTHER INFORMATION: 2'-deoxy
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (17)..(17)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (18)..(19)
; OTHER INFORMATION: 2'-deoxy
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (20)..(20)
; OTHER INFORMATION: n stands for thymidine
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (21)..(21)
; OTHER INFORMATION: 3'-3 attached terminal deoxyabasic moiety
US-10-923-330-583
```

```
Query Match 4.2%; Score 19; DB 1; Length 21;
```

```
Best Local Similarity 73.7%; Pred. No. 1e+02;
Matches 14; Conservative 5; Mismatches 0; Indels 0; Gaps 0;

QY 150 ACCGTTTCATTCTAGAGCAA 168
Db 1 ACCGUUCAUUCUAGAGCAA 19

RESULT 171
US-10-923-330-584
; Sequence 584, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; TITLE OF INVENTION: Expression Using Short Interfering RNA (siNA)
; FILE REFERENCE: 400/209 (MBH02-708-C)
; CURRENT FILING DATE: 2004-08-20
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 584
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA sense region
; NAME/KEY: misc_feature
; LOCATION: (1)..(1)
; OTHER INFORMATION: 5'-3 attached terminal deoxyabasic moiety
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (1)..(6)
; OTHER INFORMATION: 2'-deoxy
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (7)..(8)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (9)..(11)
; OTHER INFORMATION: 2'-deoxy
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (12)..(15)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (16)..(16)

Query Match 4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 73.7%; Pred. No. 1e+02;
Matches 14; Conservative 5; Mismatches 0; Indels 0; Gaps 0;

QY 300 GAAGAGTTGGGCTCTGTCA 318
Db 1 GAAGAGUUGGCUCUGUCA 19

RESULT 172
US-10-923-330-586/c
; Sequence 586, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sina Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; TITLE OF INVENTION: Expression Using Short Interfering RNA (siNA)
; FILE REFERENCE: 400/209 (MBH02-708-C)
; CURRENT FILING DATE: 2004-08-20
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 586
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
; NAME/KEY: misc_feature
; LOCATION: (1)..(2)
```

OTHER INFORMATION: 2'-deoxy-2'-fluoro  
FEATURE:  
NAME/KEY: misc\_feature  
LOCATION: (3)..(6)  
OTHER INFORMATION: 2'-deoxy  
FEATURE:  
NAME/KEY: misc\_feature  
LOCATION: (7)..(7)  
OTHER INFORMATION: 2'-deoxy-2'-fluoro  
FEATURE:  
NAME/KEY: misc\_feature  
LOCATION: (8)..(10)  
OTHER INFORMATION: 2'-deoxy  
FEATURE:  
NAME/KEY: misc\_feature  
LOCATION: (11)..(11)  
OTHER INFORMATION: 2'-deoxy-2'-fluoro  
FEATURE:  
NAME/KEY: misc\_feature  
LOCATION: (12)..(13)  
OTHER INFORMATION: 2'-deoxy  
FEATURE:  
NAME/KEY: misc\_feature  
LOCATION: (14)..(14)  
OTHER INFORMATION: 2'-deoxy-2'-fluoro  
FEATURE:  
NAME/KEY: misc\_feature  
LOCATION: (15)..(19)  
OTHER INFORMATION: 2'-deoxy  
FEATURE:  
NAME/KEY: misc\_feature  
LOCATION: (20)..(20)  
OTHER INFORMATION: Phosphorothioate 3'-Internucleotide Linkage  
FEATURE:  
NAME/KEY: misc\_feature  
LOCATION: (21)..(21)  
OTHER INFORMATION: n stands for thymidine  
US-10-923-330-586

Query Match 4.2%; Score 19; DB 1; Length 21;  
Best Local Similarity 100.0%; Pred. No. 1e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 145 CTTCCACCGTTCATTCTAG 163  
|||||  
Db 19 CTTCCACCGTTCATTCTAG 1

RESULT 173  
US-10-923-330-587/c  
Sequence 587, Application US/10923330  
Publication No. US20050153916A1  
GENERAL INFORMATION:  
APPLICANT: Sirna Therapeutics, Inc.  
APPLICANT: McSwiggen, James  
APPLICANT: Beigelman, Leonid  
TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene  
FILE REFERENCE: 400/209 (MHB02-708-C)  
CURRENT APPLICATION NUMBER: US/10/923,330  
CURRENT FILING DATE: 2004-08-20  
PRIORITY FILING DATE: 2004-05-24  
PRIORITY FILING DATE: 2004-05-24  
PRIORITY FILING DATE: 2002-07-17  
PRIORITY FILING DATE: 2004-04-16  
PRIORITY FILING DATE: 2004-01-14  
PRIORITY FILING DATE: 2003-11-24

PRIOR APPLICATION NUMBER: US 10/693,059  
PRIOR FILING DATE: 2003-11-23  
PRIOR APPLICATION NUMBER: US 10/444,853  
PRIOR FILING DATE: 2003-05-23  
PRIOR APPLICATION NUMBER: PCT/US03/05346  
PRIOR FILING DATE: 2003-02-20  
PRIOR APPLICATION NUMBER: PCT/US03/05028  
PRIOR FILING DATE: 2003-02-20  
Remaining Prior Application data removed - See File Wrapper or PALM.  
NUMBER OF SEQ ID NOS: 768  
SOFTWARE: PatentIn version 3.3  
SEQ ID NO 587  
LENGTH: 21  
TYPE: RNA  
ORGANISM: Artificial Sequence  
FEATURE:  
OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region  
FEATURE:  
NAME/KEY: misc\_feature  
LOCATION: (1)..(3)  
OTHER INFORMATION: 2'-deoxy-2'-fluoro  
FEATURE:  
NAME/KEY: misc\_feature  
LOCATION: (4)..(7)  
OTHER INFORMATION: 2'-deoxy  
FEATURE:  
NAME/KEY: misc\_feature  
LOCATION: (8)..(8)  
OTHER INFORMATION: 2'-deoxy-2'-fluoro  
FEATURE:  
NAME/KEY: misc\_feature  
LOCATION: (9)..(11)  
OTHER INFORMATION: 2'-deoxy  
FEATURE:  
NAME/KEY: misc\_feature  
LOCATION: (12)..(12)  
OTHER INFORMATION: 2'-deoxy-2'-fluoro  
FEATURE:  
NAME/KEY: misc\_feature  
LOCATION: (13)..(14)  
OTHER INFORMATION: 2'-deoxy  
FEATURE:  
NAME/KEY: misc\_feature  
LOCATION: (15)..(15)  
OTHER INFORMATION: 2'-deoxy-2'-fluoro  
FEATURE:  
NAME/KEY: misc\_feature  
LOCATION: (16)..(19)  
OTHER INFORMATION: 2'-deoxy  
FEATURE:  
NAME/KEY: misc\_feature  
LOCATION: (20)..(20)  
OTHER INFORMATION: Phosphorothioate 3'-Internucleotide Linkage  
FEATURE:  
NAME/KEY: misc\_feature  
LOCATION: (21)..(21)  
OTHER INFORMATION: n stands for thymidine  
US-10-923-330-587

Query Match 4.2%; Score 19; DB 1; Length 21;  
Best Local Similarity 100.0%; Pred. No. 1e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 146 TTCACCGTTCATTCTAGA 164  
|||||  
Db 19 TTCACCGTTCATTCTAGA 1

RESULT 174  
US-10-923-330-588/c  
Sequence 588, Application US/10923330  
Publication No. US20050153916A1  
GENERAL INFORMATION:

```
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (WBHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; PRIORITY FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 588
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
; NAME/KEY: misc feature
; LOCATION: (1)..(4)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (5)..(8)
; OTHER INFORMATION: 2'-deoxy
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (9)..(9)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (10)..(12)
; OTHER INFORMATION: 2'-deoxy
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (13)..(13)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (14)..(15)
; OTHER INFORMATION: 2'-deoxy
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (16)..(16)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (17)..(19)
; OTHER INFORMATION: 2'-deoxy
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (20)..(20)
; OTHER INFORMATION: Phosphorothioate 3'-Internucleotide Linkage
```

```
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (21)..(21)
; OTHER INFORMATION: n stands for thymidine
US-10-923-330-588

Query Match      4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 147 TCCACCGTTCATTCTAGAG 165
      |||||
Db 19 TCCACCGTTCATTCTAGAG 1

RESULT 175
US-10-923-330-589/c
; Sequence 589, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (WBHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 589
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
; NAME/KEY: misc feature
; LOCATION: (1)..(1)
; OTHER INFORMATION: 2'-deoxy
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (2)..(5)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (6)..(9)
; OTHER INFORMATION: 2'-deoxy
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (10)..(10)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
```

```

; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (11)..(13)
; OTHER INFORMATION: 2'-deoxy
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (14)..(14)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (15)..(16)
; OTHER INFORMATION: 2'-deoxy
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (17)..(17)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (18)..(19)
; OTHER INFORMATION: 2'-deoxy
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (20)..(20)
; OTHER INFORMATION: Phosphorothioate 3'-Internucleotide Linkage
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (21)..(21)
; OTHER INFORMATION: n stands for thymidine
US-10-923-330-589

```

```

Query Match          4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```

Qy 148 CCACCGTTCATTCTAGAGC 166
Db 19 CCACCGTTCATTCTAGAGC 1

```

```

RESULT 176
US-10-923-330-590/c
; Sequence 590, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; PRIOR FILING DATE: 2003-02-20
; Remaining Prior Application data removed - See File Wrapper or PALM.

```

```

; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 590
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (1)..(1)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (2)..(2)
; OTHER INFORMATION: 2'-deoxy
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (3)..(6)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (7)..(10)
; OTHER INFORMATION: 2'-deoxy
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (11)..(11)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (12)..(14)
; OTHER INFORMATION: 2'-deoxy
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (15)..(15)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (16)..(17)
; OTHER INFORMATION: 2'-deoxy
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (18)..(18)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (19)..(19)
; OTHER INFORMATION: 2'-deoxy
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (20)..(20)
; OTHER INFORMATION: Phosphorothioate 3'-Internucleotide Linkage
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (21)..(21)
; OTHER INFORMATION: n stands for thymidine
US-10-923-330-590

```

```

Query Match          4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```

Qy 149 CACCGTTCATTCTAGAGCA 167
Db 19 CACCGTTCATTCTAGAGCA 1

```

```

RESULT 177
US-10-923-330-591/c
; Sequence 591, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.

```

```
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; TITLE OF INVENTION: Expression Using Short Interfering RNA (siRNA)
; FILE REFERENCE: 400/209 (MBH02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; PRIOR FILING DATE: 2004-08-20
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; PRIOR FILING DATE: 2003-02-20
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 591
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (1)..(2)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (3)..(3)
; OTHER INFORMATION: 2'-deoxy
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (4)..(7)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (8)..(11)
; OTHER INFORMATION: 2'-deoxy
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (12)..(12)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (13)..(15)
; OTHER INFORMATION: 2'-deoxy
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (16)..(16)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (17)..(18)
; OTHER INFORMATION: 2'-deoxy
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (19)..(19)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
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; NAME/KEY: misc feature
; LOCATION: (20)..(20)
; OTHER INFORMATION: Phosphorothioate 3'-Internucleotide Linkage
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (21)..(21)
; OTHER INFORMATION: n stands for thymidine
US-10-923-330-591

Query Match          4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 150 ACGTTCATTCTAGAGCAA 168
Db 19 ACGTTCATTCTAGAGCAA 1

RESULT 178
US-10-923-330-592/c
; Sequence 592, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: McSwiggen, James
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; TITLE OF INVENTION: Expression Using Short Interfering RNA (siNA)
; FILE REFERENCE: 400/209 (MBH02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 592
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (1)..(1)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (2)..(3)
; OTHER INFORMATION: 2'-deoxy
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (4)..(4)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
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; NAME/KEY: misc_feature
; LOCATION: (5)..(8)
; OTHER INFORMATION: 2'-deoxy
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (9)..(11)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (12)..(13)
; OTHER INFORMATION: 2'-deoxy
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (14)..(19)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (20)..(20)
; OTHER INFORMATION: Phosphorothioate 3'-Internucleotide Linkage
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (21)..(21)
; OTHER INFORMATION: n stands for thymidine
;
US-10-923-330-592

Query Match          4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 300 GAAGAGTTGGGCTGTGCA 318
Db 19 GAAGAGTTGGGCTGTGCA 1

RESULT 179
US-10-923-330-594
; Sequence 594, Application US/109233330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBH02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; PRIOR FILING DATE: 2003-02-20
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 594
; LENGTH: 21
; TYPE: RNA

; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA sense region
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (1)..(1)
; OTHER INFORMATION: 5'-3 attached terminal deoxyabasic moiety
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (1)..(5)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (6)..(6)
; OTHER INFORMATION: 2'-O-methyl
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (7)..(8)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (9)..(9)
; OTHER INFORMATION: 2'-O-methyl
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (10)..(12)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (13)..(13)
; OTHER INFORMATION: 2'-O-methyl
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (14)..(17)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (18)..(19)
; OTHER INFORMATION: 2'-O-methyl
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (20)..(20)
; OTHER INFORMATION: n stands for thymidine
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (21)..(21)
; OTHER INFORMATION: 3'-3 attached terminal deoxyabasic moiety
;
US-10-923-330-594

Query Match          4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 63.2%; Pred. No. 1e+02;
Matches 12; Conservative 7; Mismatches 0; Indels 0; Gaps 0;

Qy 145 CTTCCACCGTTCATCTAG 163
Db 1 CUUCCACCGUUAUCUAG 19

RESULT 180
US-10-923-330-595
; Sequence 595, Application US/109233330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBH02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24

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; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; PRIOR FILING DATE: 2003-02-20
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 595
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA sense region
; NAME/KEY: misc_feature
; LOCATION: (1)..(1)
; OTHER INFORMATION: 5'-3 attached terminal deoxyabasic moiety
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (1)..(4)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (5)..(5)
; OTHER INFORMATION: 2'-O-methyl
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (6)..(7)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (8)..(8)
; OTHER INFORMATION: 2'-O-methyl
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (9)..(11)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (12)..(12)
; OTHER INFORMATION: 2'-O-methyl
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (13)..(16)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (17)..(19)
; OTHER INFORMATION: 2'-O-methyl
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (20)..(20)
; OTHER INFORMATION: n stands for thymidine
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (21)..(21)
; OTHER INFORMATION: 3'-3 attached terminal deoxyabasic moiety
US-10-923-330-595
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```
Query Match 4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 63.2%; Pred. No. 1e+02;
Matches 12; Conservative 7; Mismatches 0; Gaps 0;

Qy 146 TTCACCGTTCATTCTAGA 164
Db 1 UUCACCGGUCAUUCUAGA 19

RESULT 181
US-10-923-330-596
; Sequence 596, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (WBH02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 596
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA sense region
; NAME/KEY: misc_feature
; LOCATION: (1)..(1)
; OTHER INFORMATION: 5'-3 attached terminal deoxyabasic moiety
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (1)..(3)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (4)..(4)
; OTHER INFORMATION: 2'-O-methyl
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (5)..(6)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (7)..(7)
; OTHER INFORMATION: 2'-O-methyl
; FEATURE:
; NAME/KEY: misc_feature
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; LOCATION: (8)..(10)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (11)..(11)
; OTHER INFORMATION: 2'-O-methyl
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (12)..(15)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (16)..(19)
; OTHER INFORMATION: 2'-O-methyl
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (20)..(20)
; OTHER INFORMATION: n stands for thymidine
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (21)..(21)
; OTHER INFORMATION: 3'-3 attached terminal deoxyabasic moiety
US-10-923-330-596

Query Match          4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 68.4%; Pred. No. 1e+02;
Matches 13; Conservative 6; Mismatches 0; Indels 0; Gaps 0;

Qy 147 TCACCGTTCATTCTAGAC 165
Db 1 UCCACCGUUCAUUCUAGAC 19

RESULT 182
US-10-923-330-597
; Sequence 597, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBH02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; PRIOR FILING DATE: 2003-02-20
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 597
; TYPE: RNA
; ORGANISM: Artificial Sequence

; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA sense region
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (1)..(1)
; OTHER INFORMATION: 5'-3 attached terminal deoxyabasic moiety
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (1)..(2)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (3)..(3)
; OTHER INFORMATION: 2'-O-methyl
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (4)..(5)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (6)..(6)
; OTHER INFORMATION: 2'-O-methyl
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (7)..(9)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (10)..(10)
; OTHER INFORMATION: 2'-O-methyl
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (11)..(14)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (16)..(18)
; OTHER INFORMATION: 2'-O-methyl
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (19)..(19)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (20)..(20)
; OTHER INFORMATION: n stands for thymidine
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (21)..(21)
; OTHER INFORMATION: 3'-3 attached terminal deoxyabasic moiety
US-10-923-330-597

Query Match          4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 73.7%; Pred. No. 1e+02;
Matches 14; Conservative 5; Mismatches 0; Indels 0; Gaps 0;

Qy 148 CCACCGTTCATTCTAGAC 166
Db 1 CCACCGUUCAUUCUAGAC 19

RESULT 183
US-10-923-330-598
; Sequence 598, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBH02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
```

```
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 598
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA sense region
; NAME/KEY: misc_feature
; LOCATION: (1)..(1)
; OTHER INFORMATION: 5'-3 attached terminal deoxyabasic moiety
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (1)..(1)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (3)..(4)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (5)..(5)
; OTHER INFORMATION: 2'-O-methyl
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (6)..(8)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (9)..(9)
; OTHER INFORMATION: 2'-O-methyl
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (10)..(13)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (14)..(17)
; OTHER INFORMATION: 2'-O-methyl
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (18)..(18)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (19)..(19)
```

```
; OTHER INFORMATION: 2'-O-methyl
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (20)..(20)
; OTHER INFORMATION: n stands for thymidine
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (21)..(21)
; OTHER INFORMATION: 3'-3 attached terminal deoxyabasic moiety
US-10-923-330-598

Query Match 4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 73.7%; Pred. No. 1e+02;
Matches 14; Conservative 5; Mismatches 0; Indels 0; Gaps 0;

Qy 149 CACCGTTTCATTCTAGACGA 167
|||||:|||||:|||||
Db 1 CACCGUUCAUUCUAGACGA 19

RESULT 184
US-10-923-330-599
; Sequence 599, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBH02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 599
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA sense region
; NAME/KEY: misc_feature
; LOCATION: (1)..(1)
; OTHER INFORMATION: 5'-3 attached terminal deoxyabasic moiety
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (1)..(1)
; OTHER INFORMATION: 2'-O-methyl
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (2)..(3)
```



```
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBH02-708-C)
; CURRENT APPLICATION NUMBER: US 10/923,330
; PRIOR FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: PCT/US03/0528
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 602
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
; NAME/KEY: misc_feature
; LOCATION: (1)..(2)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (3)..(6)
; OTHER INFORMATION: 2'-O-methyl
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (7)..(7)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (8)..(10)
; OTHER INFORMATION: 2'-O-methyl
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (11)..(11)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (12)..(13)
; OTHER INFORMATION: 2'-O-methyl
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (14)..(14)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (15)..(19)
; OTHER INFORMATION: 2'-O-methyl
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (20)..(20)
; OTHER INFORMATION: Phosphorothioate 3'-Internucleotide Linkage
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; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (21)..(21)
; OTHER INFORMATION: n stands for thymidine
US-10-923-330-602
Query Match 4.2%; Score 19; DB 1; Length 21;
Best local similarity 100.0%; Pred. NO. 1e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 145 CTTCCACCGTTTCATTCTAG 163
Db 19 CTTCCACCGTTTCATTCTAG 1
RESULT 187
US-10-923-330-603/c
; Sequence 603, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBH02-708-C)
; CURRENT APPLICATION NUMBER: US 10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 603
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
; NAME/KEY: misc_feature
; LOCATION: (1)..(3)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (4)..(7)
; OTHER INFORMATION: 2'-O-methyl
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (8)..(8)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (9)..(11)
; OTHER INFORMATION: 2'-O-methyl
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; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (12)..(12)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (13)..(14)
; OTHER INFORMATION: 2'-O-methyl
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (15)..(15)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (16)..(19)
; OTHER INFORMATION: 2'-O-methyl
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (20)..(20)
; OTHER INFORMATION: 3'-Internucleotide Linkage
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (21)..(21)
; OTHER INFORMATION: n stands for thymidine
US-10-923-330-603

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Query Match      4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Qy 146 TTCACCGTTCATTCTAGA 164
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Db 19 TTCACCGTTCATTCTAGA 1

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RESULT 188
US-10-923-330-604/c
; Sequence 604, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; TITLE OF INVENTION: Expression Using Short Interfering RNA (siRNA)
; FILE REFERENCE: 400/209 (MBHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; PRIOR FILING DATE: 2003-02-20
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 604
; LENGTH: 21

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; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siRNA antisense region
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (1)..(4)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (5)..(8)
; OTHER INFORMATION: 2'-O-methyl
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (9)..(9)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (10)..(12)
; OTHER INFORMATION: 2'-O-methyl
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (13)..(13)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (14)..(15)
; OTHER INFORMATION: 2'-O-methyl
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (16)..(16)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (17)..(19)
; OTHER INFORMATION: 2'-O-methyl
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (20)..(20)
; OTHER INFORMATION: Phosphorothioate 3'-Internucleotide Linkage
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (21)..(21)
; OTHER INFORMATION: n stands for thymidine
US-10-923-330-604

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```

Query Match      4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Qy 147 TTCACCGTTCATTCTAGAG 165
      |||||
Db 19 TTCACCGTTCATTCTAGAG 1

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RESULT 189
US-10-923-330-605/c
; Sequence 605, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; TITLE OF INVENTION: Expression Using Short Interfering RNA (siRNA)
; FILE REFERENCE: 400/209 (MBHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390

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; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 605
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
; NAME/KEY: misc_feature
; LOCATION: (1)..(1)
; OTHER INFORMATION: 2'-O-methyl
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (2)..(5)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (6)..(9)
; OTHER INFORMATION: 2'-O-methyl
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (10)..(10)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (11)..(13)
; OTHER INFORMATION: 2'-O-methyl
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (14)..(14)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (15)..(16)
; OTHER INFORMATION: 2'-O-methyl
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (17)..(17)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (18)..(19)
; OTHER INFORMATION: 2'-O-methyl
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (20)..(20)
; OTHER INFORMATION: Phosphorothioate 3'-Internucleotide Linkage
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (21)..(21)
; OTHER INFORMATION: n stands for thymidine
; US-10-923-330-605
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```
Query Match          4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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QY      148 CCACCGTTCATTCTAGAGC 166
      |||||||
Db      19 CCACCGTTCATTCTAGAGC 1

RESULT 190
US-10-923-330-606/c
; Sequence 606, Application US/109233330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (WBH02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 606
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
; NAME/KEY: misc_feature
; LOCATION: (1)..(1)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (2)..(2)
; OTHER INFORMATION: 2'-O-methyl
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (3)..(6)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (7)..(10)
; OTHER INFORMATION: 2'-O-methyl
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (11)..(11)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (12)..(14)
; OTHER INFORMATION: 2'-O-methyl
; FEATURE:
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; NAME/KEY: misc feature
; LOCATION: (15)..(15)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (16)..(17)
; OTHER INFORMATION: 2'-O-methyl
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (18)..(18)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (19)..(19)
; OTHER INFORMATION: 2'-O-methyl
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (20)..(20)
; OTHER INFORMATION: Phosphorothioate 3'-Internucleotide Linkage
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (21)..(21)
; OTHER INFORMATION: n stands for thymidine
US-10-923-330-606

Query Match          4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 149 CACGGTTCATTCTAGACCA 167
Db 19 CACGGTTCATTCTAGACCA 1

RESULT 191
US-10-923-330-607/c
; Sequence 607, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBH02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; PRIOR FILING DATE: 2003-02-20
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 607
; LENGTH: 21
; TYPE: RNA

; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: sirna antisense region
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (1)..(2)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (3)..(3)
; OTHER INFORMATION: 2'-O-methyl
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (4)..(7)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (8)..(11)
; OTHER INFORMATION: 2'-O-methyl
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (12)..(12)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (13)..(15)
; OTHER INFORMATION: 2'-O-methyl
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (16)..(16)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (17)..(18)
; OTHER INFORMATION: 2'-O-methyl
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (19)..(19)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (20)..(20)
; OTHER INFORMATION: Phosphorothioate 3'-Internucleotide Linkage
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (21)..(21)
; OTHER INFORMATION: n stands for thymidine
US-10-923-330-607

Query Match          4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 150 ACCGTTTCATTCTAGACCA 168
Db 19 ACCGTTTCATTCTAGACCA 1

RESULT 192
US-10-923-330-608/c
; Sequence 608, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBH02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
```

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/ PRIOR APPLICATION NUMBER: US 60/396,600
/ PRIOR FILING DATE: 2002-07-17
/ PRIOR APPLICATION NUMBER: PCT/US04/16390
/ PRIOR FILING DATE: 2004-05-24
/ PRIOR APPLICATION NUMBER: US 10/826,966
/ PRIOR FILING DATE: 2004-04-16
/ PRIOR APPLICATION NUMBER: US 10/757,803
/ PRIOR FILING DATE: 2004-01-14
/ PRIOR APPLICATION NUMBER: US 10/720,448
/ PRIOR FILING DATE: 2003-11-24
/ PRIOR APPLICATION NUMBER: US 10/693,059
/ PRIOR FILING DATE: 2003-11-23
/ PRIOR APPLICATION NUMBER: US 10/444,853
/ PRIOR FILING DATE: 2003-05-23
/ PRIOR APPLICATION NUMBER: PCT/US03/05346
/ PRIOR FILING DATE: 2003-02-20
/ PRIOR APPLICATION NUMBER: PCT/US03/05028
/ PRIOR FILING DATE: 2003-02-20
/ Remaining Prior Application data removed - See File Wrapper or PALM.
/ NUMBER OF SEQ ID NOS: 768
/ SOFTWARE: PatentIn version 3.3
/ SEQ ID NO 608
/ LENGTH: 21
/ TYPE: RNA
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
/ NAME/KEY: misc feature
/ LOCATION: (1)..(1)
/ OTHER INFORMATION: 2'-deoxy-2'-fluoro
/ FEATURE:
/ NAME/KEY: misc feature
/ LOCATION: (2)..(3)
/ OTHER INFORMATION: 2'-O-methyl
/ FEATURE:
/ NAME/KEY: misc feature
/ LOCATION: (4)..(4)
/ OTHER INFORMATION: 2'-deoxy-2'-fluoro
/ FEATURE:
/ NAME/KEY: misc feature
/ LOCATION: (5)..(8)
/ OTHER INFORMATION: 2'-O-methyl
/ FEATURE:
/ NAME/KEY: misc feature
/ LOCATION: (9)..(11)
/ OTHER INFORMATION: 2'-deoxy-2'-fluoro
/ FEATURE:
/ NAME/KEY: misc feature
/ LOCATION: (12)..(13)
/ OTHER INFORMATION: 2'-O-methyl
/ FEATURE:
/ NAME/KEY: misc feature
/ LOCATION: (14)..(19)
/ OTHER INFORMATION: 2'-deoxy-2'-fluoro
/ FEATURE:
/ NAME/KEY: misc feature
/ LOCATION: (20)..(20)
/ OTHER INFORMATION: Phosphorothioate 3'-Internucleotide Linkage
/ FEATURE:
/ NAME/KEY: misc feature
/ LOCATION: (21)..(21)
/ OTHER INFORMATION: n stands for thymidine
US-10-923-330-608
```

```
Query Match 4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. NO. 1e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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Qy 300 GAAGAGTTGGGCTCTGTCA 318
Db 19 GAAGAGTTGGGCTCTGTCA 1
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RESULT 193
US-10-923-330-610
/ Sequence 610, Application US/10923330
/ Publication No. US20050153916A1
/ GENERAL INFORMATION:
/ APPLICANT: Sirna Therapeutics, Inc.
/ APPLICANT: McSwiggen, James
/ APPLICANT: Beigelman, Leonid
/ TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
/ FILE REFERENCE: 400/209 (MRH02-708-C)
/ CURRENT APPLICATION NUMBER: US/10/923,330
/ CURRENT FILING DATE: 2004-08-20
/ PRIOR APPLICATION NUMBER: PCT/US03/04088
/ PRIOR FILING DATE: 2004-05-24
/ PRIOR APPLICATION NUMBER: US 60/396,600
/ PRIOR FILING DATE: 2002-07-17
/ PRIOR APPLICATION NUMBER: PCT/US04/16390
/ PRIOR FILING DATE: 2004-05-24
/ PRIOR APPLICATION NUMBER: US 10/826,966
/ PRIOR FILING DATE: 2004-04-16
/ PRIOR APPLICATION NUMBER: US 10/757,803
/ PRIOR FILING DATE: 2004-01-14
/ PRIOR APPLICATION NUMBER: US 10/720,448
/ PRIOR FILING DATE: 2003-11-24
/ PRIOR APPLICATION NUMBER: US 10/693,059
/ PRIOR FILING DATE: 2003-11-23
/ PRIOR APPLICATION NUMBER: US 10/444,853
/ PRIOR FILING DATE: 2003-05-23
/ PRIOR APPLICATION NUMBER: PCT/US03/05346
/ PRIOR FILING DATE: 2003-02-20
/ PRIOR APPLICATION NUMBER: PCT/US03/05028
/ PRIOR FILING DATE: 2003-02-20
/ Remaining Prior Application data removed - See File Wrapper or PALM.
/ NUMBER OF SEQ ID NOS: 768
/ SOFTWARE: PatentIn version 3.3
/ SEQ ID NO 610
/ LENGTH: 21
/ TYPE: RNA
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: Description of Artificial Sequence: siNA sense region
/ NAME/KEY: misc feature
/ LOCATION: (1)..(1)
/ OTHER INFORMATION: 5'-3 attached terminal deoxyabasic moiety
/ FEATURE:
/ NAME/KEY: misc feature
/ LOCATION: (20)..(20)
/ OTHER INFORMATION: n stands for thymidine
/ FEATURE:
/ NAME/KEY: misc feature
/ LOCATION: (21)..(21)
/ OTHER INFORMATION: 3'-3 attached terminal deoxyabasic moiety
US-10-923-330-610
```

```
Query Match 4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 63.2%; Pred. No. 1e+02;
Matches 12; Conservative 7; Mismatches 0; Indels 0; Gaps 0;
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```
Qy 145 CTTCCACCGTTCATCTAG 163
Db 1 CUUCCACCGUUCUUCUAG 19
```

```
RESULT 194
US-10-923-330-611
/ Sequence 611, Application US/10923330
/ Publication No. US20050153916A1
/ GENERAL INFORMATION:
/ APPLICANT: Sirna Therapeutics, Inc.
/ APPLICANT: McSwiggen, James
```

```

;          structure
; LOCATION: (20)..(20)
; OTHER INFORMATION: n stands for thymidine
; FEATURE:
; NAME/KEY: miscfeature
; LOCATION: (21)..(21)
; OTHER INFORMATION: 3'-3 attached terminal deoxyabasic moiety
US-10-923-330-611

```

RESULT 196  
US-10-923-330-613  
; Sequence 613, Application US/10923330  
; Publication No. US20050153916A1  
; GENERAL INFORMATION:  
; APPLICANT: Sirna Therapeutics, Inc.

```

, TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
,
, TITLE OF INVENTION: Expression Using Short Interfering RNA (siRNA)
,
, FILE REFERENCE: 400/209 (MBHB02-708-C)
,
, CURRENT APPLICATION NUMBER: US/10/923,330
,
, CURRENT FILING DATE: 2004-08-20
,
, PRIOR APPLICATION NUMBER: PCT/US03/04088
,
, PRIOR FILING DATE: 2004-05-24
,
, PRIOR APPLICATION NUMBER: US 60/396,600
,
, PRIOR FILING DATE: 2002-07-17
,
, PRIOR APPLICATION NUMBER: PCT/US04/16390
,
, PRIOR FILING DATE: 2004-05-24
,
, PRIOR APPLICATION NUMBER: US 10/826,966
,
, PRIOR FILING DATE: 2004-04-16
,
, PRIOR APPLICATION NUMBER: US 10/757,803
,
, PRIOR FILING DATE: 2004-01-14

```

```
/ PRIOR APPLICATION NUMBER: US 10/720,448
/ PRIOR FILING DATE: 2003-11-24
/ PRIOR APPLICATION NUMBER: US 10/693,059
/ PRIOR FILING DATE: 2003-11-23
/ PRIOR APPLICATION NUMBER: US 10/444,853
/ PRIOR FILING DATE: 2003-05-23
/ PRIOR APPLICATION NUMBER: PCT/US03/05346
/ PRIOR FILING DATE: 2003-02-20
/ PRIOR APPLICATION NUMBER: PCT/US03/05028
/ PRIOR FILING DATE: 2003-02-20
/ Remaining Prior Application data removed - See File Wrapper or PALM.
/ NUMBER OF SEQ ID NOS: 768
/ SOFTWARE: PatentIn version 3.3
/ SEQ ID NO 613
/ LENGTH: 21
/ TYPE: RNA
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: Description of Artificial Sequence: siNA sense region
/ FEATURE:
/ NAME/KEY: misc_feature
/ LOCATION: (1)..(1)
/ OTHER INFORMATION: 5'-3 attached terminal deoxyabasic moiety
/ FEATURE:
/ NAME/KEY: misc_feature
/ LOCATION: (20)..(20)
/ OTHER INFORMATION: n stands for thymidine
/ FEATURE:
/ NAME/KEY: misc_feature
/ LOCATION: (21)..(21)
/ OTHER INFORMATION: 3'-3 attached terminal deoxyabasic moiety
US-10-923-330-613

Query Match          4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 73.7%; Pred. No. 1e+02;
Matches 14; Conservative 5; Mismatches 0; Indels 0; Gaps 0;

QY 148 CCACGTTTCATTCTAGAGC 166
Db 1 CCACGUUCAUUCUAGAGC 19
|||||:|||||

RESULT 197
US-10-923-330-614
/ Sequence 614, Application US/10923330
/ Publication No. US20050153916A1
/ GENERAL INFORMATION:
/ APPLICANT: Sirna Therapeutics, Inc.
/ APPLICANT: McSwiggen, James
/ APPLICANT: Beigelman, Leonid
/ TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
/ FILE REFERENCE: 400/209 (WBHB02-708-C)
/ CURRENT APPLICATION NUMBER: US/10/923,330
/ CURRENT FILING DATE: 2004-08-20
/ PRIOR APPLICATION NUMBER: PCT/US03/04088
/ PRIOR FILING DATE: 2004-05-24
/ PRIOR APPLICATION NUMBER: US 60/396,600
/ PRIOR FILING DATE: 2002-07-17
/ PRIOR APPLICATION NUMBER: PCT/US04/16390
/ PRIOR FILING DATE: 2004-01-14
/ PRIOR APPLICATION NUMBER: US 10/757,803
/ PRIOR FILING DATE: 2003-11-24
/ PRIOR APPLICATION NUMBER: PCT/US03/05346
/ PRIOR FILING DATE: 2003-05-23
/ PRIOR APPLICATION NUMBER: PCT/US03/05028
/ PRIOR FILING DATE: 2003-02-20
/ Remaining Prior Application data removed - See File Wrapper or PALM.
/ NUMBER OF SEQ ID NOS: 768
/ SOFTWARE: PatentIn version 3.3
/ SEQ ID NO 615
/ LENGTH: 21
/ TYPE: RNA
```

```
/ PRIOR APPLICATION NUMBER: PCT/US03/05028
/ PRIOR FILING DATE: 2003-02-20
/ Remaining Prior Application data removed - See File Wrapper or PALM.
/ NUMBER OF SEQ ID NOS: 768
/ SOFTWARE: PatentIn version 3.3
/ SEQ ID NO 614
/ LENGTH: 21
/ TYPE: RNA
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: Description of Artificial Sequence: siNA sense region
/ FEATURE:
/ NAME/KEY: misc_feature
/ LOCATION: (1)..(1)
/ OTHER INFORMATION: 5'-3 attached terminal deoxyabasic moiety
/ FEATURE:
/ NAME/KEY: misc_feature
/ LOCATION: (20)..(20)
/ OTHER INFORMATION: n stands for thymidine
/ FEATURE:
/ NAME/KEY: misc_feature
/ LOCATION: (21)..(21)
/ OTHER INFORMATION: 3'-3 attached terminal deoxyabasic moiety
US-10-923-330-614

Query Match          4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 73.7%; Pred. No. 1e+02;
Matches 14; Conservative 5; Mismatches 0; Indels 0; Gaps 0;

QY 149 CACCGTTTCATTCTAGAGCA 167
Db 1 CACCGUUCAUUCUAGAGCA 19
|||||:|||||

RESULT 198
US-10-923-330-615
/ Sequence 615, Application US/10923330
/ Publication No. US20050153916A1
/ GENERAL INFORMATION:
/ APPLICANT: Sirna Therapeutics, Inc.
/ APPLICANT: McSwiggen, James
/ APPLICANT: Beigelman, Leonid
/ TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
/ FILE REFERENCE: 400/209 (WBHB02-708-C)
/ CURRENT APPLICATION NUMBER: US/10/923,330
/ CURRENT FILING DATE: 2004-08-20
/ PRIOR APPLICATION NUMBER: PCT/US03/04088
/ PRIOR FILING DATE: 2004-05-24
/ PRIOR APPLICATION NUMBER: US 60/396,600
/ PRIOR FILING DATE: 2002-07-17
/ PRIOR APPLICATION NUMBER: PCT/US04/16390
/ PRIOR FILING DATE: 2004-05-24
/ PRIOR APPLICATION NUMBER: US 10/826,966
/ PRIOR FILING DATE: 2004-04-16
/ PRIOR APPLICATION NUMBER: US 10/757,803
/ PRIOR FILING DATE: 2004-01-14
/ PRIOR APPLICATION NUMBER: US 10/720,448
/ PRIOR FILING DATE: 2003-11-24
/ PRIOR APPLICATION NUMBER: PCT/US03/05346
/ PRIOR FILING DATE: 2003-05-23
/ PRIOR APPLICATION NUMBER: PCT/US03/05028
/ PRIOR FILING DATE: 2003-02-20
/ Remaining Prior Application data removed - See File Wrapper or PALM.
/ NUMBER OF SEQ ID NOS: 768
/ SOFTWARE: PatentIn version 3.3
/ SEQ ID NO 615
/ LENGTH: 21
/ TYPE: RNA
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```
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA sense region
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (1)..(1)
; OTHER INFORMATION: 5'-3 attached terminal deoxyabasic moiety
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (20)..(20)
; OTHER INFORMATION: n stands for thymidine
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (21)..(21)
; OTHER INFORMATION: 3'-3 attached terminal deoxyabasic moiety
US-10-923-330-615

Query Match          4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 73.7%; Pred. No. 1e+02;
Matches 14; Conservative 5; Mismatches 0; Indels 0; Gaps 0;

Qy 150 ACCGTCATTCTAGACAA 168
Db 1 ACCGUUCUUCUAGACAA 19
|||||:|||||

RESULT 199
US-10-923-330-616
; Sequence 616, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBH02-708-C)
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: US/10/923,330
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 616
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA sense region
; NAME/KEY: misc feature
; LOCATION: (20)..(20)
; OTHER INFORMATION: 5'-3 attached terminal deoxyabasic moiety
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (1)..(1)
; OTHER INFORMATION: 5'-3 attached terminal deoxyabasic moiety
; FEATURE:
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```
; NAME/KEY: misc feature
; LOCATION: (20)..(20)
; OTHER INFORMATION: n stands for thymidine
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (21)..(21)
; OTHER INFORMATION: 3'-3 attached terminal deoxyabasic moiety
US-10-923-330-616

Query Match          4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 73.7%; Pred. No. 1e+02;
Matches 14; Conservative 5; Mismatches 0; Indels 0; Gaps 0;

Qy 300 GAAGAGTGGGCTCTCTCA 318
Db 1 GAAGAGUUGGGCUCUGUCA 19
|||||:|||||

RESULT 200
US-10-923-330-618/c
; Sequence 618, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBH02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 618
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
; NAME/KEY: misc feature
; LOCATION: (20)..(20)
; OTHER INFORMATION: Phosphorothioate 3'-Internucleotide Linkage
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (21)..(21)
; OTHER INFORMATION: n stands for thymidine
US-10-923-330-618

Query Match          4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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```
Qy 145 CTTCCACCGTTCATTCTAG 163
Db 19 CTTCCACCGTTCATTCTAG 1

RESULT 201
US-10-923-330-619/c
; Sequence 619, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (WBH02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; PRIOR FILING DATE: 2003-02-20
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 619
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
; NAME/KEY: misc feature
; LOCATION: (20)..(20)
; OTHER INFORMATION: Phosphorothioate 3'-Internucleotide Linkage
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (21)..(21)
; OTHER INFORMATION: n stands for thymidine
US-10-923-330-619

Query Match 4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 146 TTCACCGTTCATTCTAGA 164
Db 19 TTCACCGTTCATTCTAGA 1

RESULT 202
US-10-923-330-620/c
; Sequence 620, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (WBH02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390

Query Match 4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 147 TCCACCGTTCATTCTAGAG 165
Db 19 TCCACCGTTCATTCTAGAG 1

RESULT 203
US-10-923-330-621/c
; Sequence 621, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (WBH02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390

Query Match 4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 148 TCCACCGTTCATTCTAGAG 166
Db 19 TCCACCGTTCATTCTAGAG 1

RESULT 204
US-10-923-330-622/c
; Sequence 622, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (WBH02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
```

```
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; Remaining Prior Application data removed - See File Wrapper or PALM.
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 621
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
;
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (20)..(20)
; OTHER INFORMATION: Phosphorothioate 3'-Internucleotide Linkage
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (21)..(21)
; OTHER INFORMATION: n stands for thymidine
US-10-923-330-621

Query Match          4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 148 CCACCGTTCATTCTAGAGC 166
Db 19 CCACCGTTCATTCTAGAGC 1

RESULT 204
US-10-923-330-622/c
; Sequence 622, Application US/10923330
; Publication No US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MHB02-708-C)
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: US/10/923,330
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-05-23
; Remaining Prior Application data removed - See File Wrapper or PALM.
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 622
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
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; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; PRIOR FILING DATE: 2003-02-20
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 622
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
;
; NAME/KEY: misc feature
; LOCATION: (20)..(20)
; OTHER INFORMATION: Phosphorothioate 3'-Internucleotide Linkage
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (21)..(21)
; OTHER INFORMATION: n stands for thymidine
US-10-923-330-622

Query Match          4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 149 CACCGTTCATTCTAGAGCA 167
Db 19 CACCGTTCATTCTAGAGCA 1

RESULT 205
US-10-923-330-623/c
; Sequence 623, Application US/10923330
; Publication No US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MHB02-708-C)
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-05-23
; Remaining Prior Application data removed - See File Wrapper or PALM.
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 623
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
```

```

; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (20)..(20)
; OTHER INFORMATION: n stands for thymidine
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (21)..(21)
; OTHER INFORMATION: Phosphorothioate 3'-Internucleotide Linkage
US-10-923-330-623

Query Match          4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 150 ACCGTTCAATTCAGAGCAA 168
Db 19 ACCGTTCAATTCAGAGCAA 1

RESULT 206
US-10-923-330-624/c
; Sequence 624, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 624
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (20)..(20)
; OTHER INFORMATION: Phosphorothioate 3'-Internucleotide Linkage
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (21)..(21)
; OTHER INFORMATION: n stands for thymidine
US-10-923-330-624

Query Match          4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 300 GAAGAGTTGGGCTCTGTCA 318
Db 19 GAAGAGTTGGGCTCTGTCA 1

RESULT 207
US-10-923-330-626/c
; Sequence 626, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 626
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (1)..(2)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (3)..(6)
; OTHER INFORMATION: 2'-O-methyl
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (7)..(7)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (8)..(10)
; OTHER INFORMATION: 2'-O-methyl
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (11)..(11)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (12)..(13)
; OTHER INFORMATION: 2'-O-methyl

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; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (14)..(14)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (15)..(19)
; OTHER INFORMATION: 2'-O-methyl
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (20)..(20)
; OTHER INFORMATION: n stands for thymidine
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (21)..(21)
; OTHER INFORMATION: 3'-3 attached terminal deoxyabasic moiety
US-10-923-330-626

Query Match          4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 145 CTTCCACCGTTCATTCTAG 163
Db 19 CTTCCACCGTTCATTCTAG 1

RESULT 208
US-10-923-330-627/c
; Sequence 627, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; PRIOR FILING DATE: 2003-02-20
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 627
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (1)..(3)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
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; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (4)..(7)
; OTHER INFORMATION: 2'-O-methyl
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (8)..(8)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (9)..(11)
; OTHER INFORMATION: 2'-O-methyl
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (12)..(12)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (13)..(14)
; OTHER INFORMATION: 2'-O-methyl
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (15)..(15)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (16)..(19)
; OTHER INFORMATION: 2'-O-methyl
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (20)..(20)
; OTHER INFORMATION: n stands for thymidine
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (21)..(21)
; OTHER INFORMATION: 3'-3 attached terminal deoxyabasic moiety
US-10-923-330-627

Query Match          4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 146 TTCACCGTTCATTCTAGA 164
Db 19 TTCACCGTTCATTCTAGA 1

RESULT 209
US-10-923-330-628/c
; Sequence 628, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
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; NAME/KEY: misc_feature
; LOCATION: (20)..(20)
; OTHER INFORMATION: n stands for thymidine
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (21)..(21)
; OTHER INFORMATION: 3'-3 attached terminal deoxyabasic moiety
US-10-923-330-629

Query Match          4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 148 CCACCGTTCATTCTAGAGC 166
Db 19 CCACCGTTCATTCTAGAGC 1

RESULT 211
US-10-923-330-630/c
; Sequence 630, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 630
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (1)..(1)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (2)..(2)
; OTHER INFORMATION: 2'-O-methyl
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (3)..(6)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:

; NAME/KEY: misc_feature
; LOCATION: (7)..(10)
; OTHER INFORMATION: 2'-O-methyl
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (11)..(11)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (12)..(14)
; OTHER INFORMATION: 2'-O-methyl
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (15)..(15)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (16)..(17)
; OTHER INFORMATION: 2'-O-methyl
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (18)..(18)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (19)..(19)
; OTHER INFORMATION: 2'-O-methyl
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (20)..(20)
; OTHER INFORMATION: n stands for thymidine
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (21)..(21)
; OTHER INFORMATION: 3'-3 attached terminal deoxyabasic moiety
US-10-923-330-630

Query Match          4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 149 CACCGTTCATTCTAGACCA 167
Db 19 CACCGTTCATTCTAGACCA 1

RESULT 212
US-10-923-330-631/c
; Sequence 631, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
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; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; PRIOR FILING DATE: 2003-02-20
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 631
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (1)..(2)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (3)..(3)
; OTHER INFORMATION: 2'-O-methyl
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (4)..(7)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (8)..(11)
; OTHER INFORMATION: 2'-O-methyl
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (12)..(12)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (13)..(15)
; OTHER INFORMATION: 2'-O-methyl
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (16)..(16)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (17)..(18)
; OTHER INFORMATION: 2'-O-methyl
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (19)..(19)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (20)..(20)
; OTHER INFORMATION: n stands for thymidine
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (21)..(21)
; OTHER INFORMATION: 3'-3 attached terminal deoxyabasic moiety
US-10-923-330-631
```

```
Query Match 4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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```
QY 150 ACCGTTCACTTAGAGCAA 168
Db 19 ACCGTTCACTTAGAGCAA 1
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RESULT 213
US-10-923-330-632/c
; Sequence 632, Application US/10923330
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; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; TITLE OF INVENTION: Expression Using Short Interfering RNA (siNA)
; FILE REFERENCE: 400/209 (WBH02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 632
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (1)..(1)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (2)..(3)
; OTHER INFORMATION: 2'-O-methyl
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (4)..(4)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (5)..(8)
; OTHER INFORMATION: 2'-O-methyl
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (9)..(11)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (12)..(13)
; OTHER INFORMATION: 2'-O-methyl
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (14)..(19)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (20)..(20)
; OTHER INFORMATION: n stands for thymidine
; FEATURE:
; NAME/KEY: misc_feature
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FILE REFERENCE: 400/209 (MBHB02-708

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; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; PRIOR FILING DATE: 2003-02-20
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 636
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
; NAME/KEY: misc_feature
; LOCATION: (20)..(20)
; OTHER INFORMATION: n stands for thymidine
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (21)..(21)
; OTHER INFORMATION: 3'-3 attached terminal deoxyabasic moiety
; US-10-923-330-636

Query Match          4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 147 TCCACCGTTCATTCTAGAG 165
Db 19 TCCACCGTTCATTCTAGAG 1

RESULT 217
US-10-923-330-637/c
; Sequence 637, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2003-02-20
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 636
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
; NAME/KEY: misc_feature
; LOCATION: (20)..(20)
; OTHER INFORMATION: n stands for thymidine
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (21)..(21)
; OTHER INFORMATION: 3'-3 attached terminal deoxyabasic moiety
; US-10-923-330-636

Query Match          4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 147 TCCACCGTTCATTCTAGAG 165
Db 19 TCCACCGTTCATTCTAGAG 1

RESULT 217
US-10-923-330-637/c
; Sequence 637, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2003-02-20
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 636
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
; NAME/KEY: misc_feature
; LOCATION: (20)..(20)
; OTHER INFORMATION: n stands for thymidine
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (21)..(21)
; OTHER INFORMATION: 3'-3 attached terminal deoxyabasic moiety
; US-10-923-330-636
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; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; PRIOR FILING DATE: 2003-02-20
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 637
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
; NAME/KEY: misc_feature
; LOCATION: (20)..(20)
; OTHER INFORMATION: n stands for thymidine
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (21)..(21)
; OTHER INFORMATION: 3'-3 attached terminal deoxyabasic moiety
; US-10-923-330-637

Query Match          4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 148 CCACCGTTCATTCTAGAGC 166
Db 19 CCACCGTTCATTCTAGAGC 1

RESULT 218
US-10-923-330-638/c
; Sequence 638, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; PRIOR FILING DATE: 2003-02-20
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
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RESULT 221
US-10-900-231-126
; Sequence 126, Application US/10900231
; Publication No. US2005017602A1
; GENERAL INFORMATION:
; APPLICANT: Kilian, Andrzej
; APPLICANT: Botwell, David
; TITLE OF INVENTION: VERTEBRATE TELOMERASE GENES AND PROTEINS AND USES
; TITLE OF INVENTION: THEREOF
; FILE REFERENCE: TMGL 407C3
; CURRENT APPLICATION NUMBER: US/10/900,231
; CURRENT FILING DATE: 2004-07-27
; NUMBER OF SEQ ID NOS: 155
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 126
; TYPE: DNA
; LENGTH: 18
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Synthesized
; OTHER INFORMATION: Amplification Primer Design based on EST Sequence
; OTHER INFORMATION: GenBank Accession Number AA281296
US-10-900-231-126

Query Match          4.0%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 93;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 GGGTTGCGGAGGTGGGC 18
Db 1 GGGTTGCGGAGGTGGGC 18

RESULT 222
US-10-325-810-543/c
; Sequence 543, Application US/10325810
; Publication No. US20030204069A1
; GENERAL INFORMATION:
; APPLICANT: Cech, Thomas R.
; Lingner, Joachim
; Nakamura, Toru
; Chapman, Karen B.
; Morin, Gregg B.
; Harley, Calvin B.
; Andrews, William H.
; TITLE OF INVENTION: Human Telomerase Catalytic Subunit
; NUMBER OF SEQUENCES: 633
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/10/325,810
; FILING DATE: 20-Dec-2002
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/09/402,181
; FILING DATE: 29-Sep-1997
; APPLICATION NUMBER: US 08/724,643
; FILING DATE: 01-OCT-1996
; APPLICATION NUMBER: US 08/844,419
; FILING DATE: 18-APR-1997
; APPLICATION NUMBER: US 08/846,017

;
; FILING DATE: 25-APR-1997
; APPLICATION NUMBER: US 08/851,843
; FILING DATE: 06-MAY-1997
; APPLICATION NUMBER: US 08/854,050
; FILING DATE: 09-MAY-1997
; APPLICATION NUMBER: US 08/911,312
; FILING DATE: 14-AUG-1997
; APPLICATION NUMBER: US 08/912,951
; FILING DATE: 14-AUG-1997
; APPLICATION NUMBER: US 08/915,503
; FILING DATE: 14-AUG-1997
; APPLICATION NUMBER: WO PCT/US97/17885
; FILING DATE: 01-OCT-1997
; ATTORNEY/AGENT INFORMATION:
; NAME: Ausenhus, Scott L.
; REGISTRATION NUMBER: 42,271
; REFERENCE/DOCKET NUMBER: 015389-002620US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 543:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 18 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
; FEATURE:
; NAME/KEY: -
; LOCATION: 1..18
; OTHER INFORMATION: /note= "antisense hTERT molecule"
; SEQUENCE DESCRIPTION: SEQ ID NO: 543:
US-10-325-810-543

Query Match          3.6%; Score 16.4; DB 1; Length 18;
Best Local Similarity 94.4%; Pred. No. 1.4e+02;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 149 CACGTTTCATTCTAGGC 166
Db 18 CACCTTCATTCTAGGC 1

RESULT 223
US-10-877-124-543/c
; Sequence 543, Application US/10877124
; Publication No. US20040242529A1
; GENERAL INFORMATION:
; APPLICANT: Cech, Thomas R.
; Lingner, Joachim
; Nakamura, Toru
; Chapman, Karen B.
; Morin, Gregg B.
; Harley, Calvin B.
; Andrews, William H.
; TITLE OF INVENTION: Human Telomerase Catalytic Subunit
; NUMBER OF SEQUENCES: 727
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/10/877,124
; FILING DATE: 24-Jun-2004
; CLASSIFICATION: <Unknown>
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; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/09/432,503
; FILING DATE: 02-Nov-1999
; APPLICATION NUMBER: 08/974,549
; FILING DATE: <Unknown>
; APPLICATION NUMBER: US 08/844,419
; FILING DATE: 18-APR-1997
; APPLICATION NUMBER: US 08/846,017
; FILING DATE: 25-APR-1997
; APPLICATION NUMBER: US 08/851,843
; FILING DATE: 06-MAY-1997
; APPLICATION NUMBER: US 08/854,050
; FILING DATE: 09-MAY-1997
; APPLICATION NUMBER: US 08/911,312
; FILING DATE: 14-AUG-1997
; APPLICATION NUMBER: WO PCT/US97/17618
; FILING DATE: 01-OCT-1997
; APPLICATION NUMBER: WO PCT/US97/17885
; FILING DATE: 01-OCT-1997
; ATTORNEY/AGENT INFORMATION:
; NAME: Apple, Randolph Ted
; REGISTRATION NUMBER: 36,429
; REFERENCE/DOCKET NUMBER: 015389-002610US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 543:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 18 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
; FEATURE:
; NAME/KEY: -
; LOCATION: 1..18
; OTHER INFORMATION: /note= "antisense hTRT molecule"
; SEQUENCE DESCRIPTION: SEQ ID NO: 543:
US-10-877-124-543

Query Match 3.6%; Score 16.4; DB 1; Length 18;
Best Local Similarity 94.4%; Pred. No. 1.4e+02;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 149 CACCGTTCATCTAGAGC 166
Db 18 CACCGTTCATCTAGAGC 1

RESULT 224
US-10-877-022-543/c
; Sequence 543, Application US/10877022
; Publication No. US20040247613A1
; GENERAL INFORMATION:
; APPLICANT: Cech, Thomas R.
; Lingner, Joachim
; Nakamura, Toru
; Chapman, Karen B.
; Morin, Gregg B.
; Harley, Calvin B.
; Andrews, William H.
; TITLE OF INVENTION: Human Telomerase Catalytic Subunit
; NUMBER OF SEQUENCES: 727
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA

;
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA: US/10/877,022
; FILING DATE: 24-Jun-2004
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/09/432,503
; FILING DATE: 02-Nov-1999
; APPLICATION NUMBER: 08/974,549
; FILING DATE: <Unknown>
; APPLICATION NUMBER: US 08/844,419
; FILING DATE: 18-APR-1997
; APPLICATION NUMBER: US 08/846,017
; FILING DATE: 25-APR-1997
; APPLICATION NUMBER: US 08/851,843
; FILING DATE: 06-MAY-1997
; APPLICATION NUMBER: US 08/854,050
; FILING DATE: 09-MAY-1997
; APPLICATION NUMBER: US 08/911,312
; FILING DATE: 14-AUG-1997
; APPLICATION NUMBER: WO PCT/US97/17618
; FILING DATE: 01-OCT-1997
; APPLICATION NUMBER: WO PCT/US97/17885
; FILING DATE: 01-OCT-1997
; ATTORNEY/AGENT INFORMATION:
; NAME: Apple, Randolph Ted
; REGISTRATION NUMBER: 36,429
; REFERENCE/DOCKET NUMBER: 015389-002610US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 543:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 18 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
; FEATURE:
; NAME/KEY: -
; LOCATION: 1..18
; OTHER INFORMATION: /note= "antisense hTRT molecule"
; SEQUENCE DESCRIPTION: SEQ ID NO: 543:
US-10-877-022-543

Query Match 3.6%; Score 16.4; DB 1; Length 18;
Best Local Similarity 94.4%; Pred. No. 1.4e+02;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 149 CACCGTTCATCTAGAGC 166
Db 18 CACCGTTCATCTAGAGC 1

RESULT 225
US-10-877-146-543/c
; Sequence 543, Application US/10877146
; Publication No. US20050013825A1
; GENERAL INFORMATION:
; APPLICANT: Cech, Thomas R.
; Lingner, Joachim
; Nakamura, Toru
; Chapman, Karen B.
; Morin, Gregg B.
; TITLE OF INVENTION: Human Telomerase Catalytic Subunit
; NUMBER OF SEQUENCES: 727
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
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Query Match	3.6%	Score 16.4;	DB 1;	Length 18;
Best Local Similarity	94.4%;	Pred. NO. 1.4e+03;		
Matches 17;	Conservative 0;	Mismatches 1;	Indels 0;	Gaps 0;
QY	149	CACGGTTCATTC	TAGAGC	166
Db	18	CACCCCTTCATTC	TAGAGC	1

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RESULT 226
US-09-997-8668-13
; Sequence 13, Application US/09997868
; Publication No. US20030031654A1
; GENERAL INFORMATION:
; APPLICANT: Gorman, Cornelia M.,
; Groskreutz, Debyra J.
; TITLE OF INVENTION: Prohormone Convertase Transformed Cells and
; Polypeptide Synthesis
; NUMBER OF SEQUENCES: 57
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Genentech, Inc.
; STREET: 1 DNA Way
; CITY: South San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94080
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: WinPatIn (Genentech)
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/997,868
; FILING DATE: 12-Mar-2002
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 07/887265
; FILING DATE: 22-May-1992
; APPLICATION NUMBER: 07/803631
; FILING DATE: 06-DEC-1992
; APPLICATION NUMBER: PCT/US92/10621
; FILING DATE: 04-DEC-1992
; ATTORNEY/AGENT INFORMATION:
; NAME: Love, Richard B.
; REGISTRATION NUMBER: 34,659
; REFERENCE/DOCKET NUMBER: P0749P3
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 650/225-5530
; TELEFAX: 650/952-9881
; INFORMATION FOR SEQ ID NO: 13:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 21 base pairs
; TYPE: Nucleic Acid
; STRANDEDNESS: Single
; TOPOLOGY: Linear
; SEQUENCE DESCRIPTION: SEQ ID NO: 13:
US-09-997-868-13

Query Match 3.6%; Score 16.2; DB 1; Length 21;
Best Local Similarity 85.7%; Pred. No. 2e+02;
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps:

QY 156 CATTCTAGACAAACAAAAA 176
Db 1 CATTCTAGACAAAGAGACAA 21

RESULT 227
US-10-900-231-127/c
; Sequence 127, Application US/10900231
; Publication No. US20050176022A1
; GENERAL INFORMATION:
; APPLICANT: Kilian, Andrzej
; APPLICANT: Bowtell, David
; TITLE OF INVENTION: VERTEBRATE TELOMERASE GENES AND PROTEINS AND USES
; TITLE OF INVENTION: THREEOF
; FILE REFERENCE: TWGL 407C3
; CURRENT APPLICATION NUMBER: US/10/900,231
; CURRENT FILING DATE: 2004-07-27
; NUMBER OF SEQ ID NOS: 155
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 127

```

```
; LENGTH: 21
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Synthesized
; OTHER INFORMATION: Amplification Primer Design based on EST Sequence
; OTHER INFORMATION: GenBank Accession Number AA281296
US-10-900-231-127

Query Match          3.6%; Score 16.2; DB 1; Length 21;
Best Local Similarity 85.7%; Pred. No. 2e+02;
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 431 CAGGACTCGGCTCACATGC 451
Db 21 CAGGACTCGGCTCACCATGC 1

RESULT 228
US-10-174-020-71/c
; Sequence 71, Application US/10174020
; Publication No. US20030232770A1
; GENERAL INFORMATION:
; APPLICANT: Brett P. Monia
; APPLICANT: Kenneth W. Dobie
; TITLE OF INVENTION: ANTISENSE MODULATION OF HYPOTHETICAL TUMOR ENDOTHELIAL MARKER EXP
; FILE REFERENCE: RTS-0369
; CURRENT APPLICATION NUMBER: US/10/174.020
; CURRENT FILING DATE: 2002-06-17
; NUMBER OF SEQ ID NOS: 149
; SEQ ID NO 71
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-174-020-71

Query Match          3.5%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 1.9e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 362 GGCCGACAGGAAGGAACG 380
Db 20 GGCCACAGGAAGGAACG 2

RESULT 229
US-10-174-020-138
; Sequence 138, Application US/10174020
; Publication No. US20030232770A1
; GENERAL INFORMATION:
; APPLICANT: Brett P. Monia
; APPLICANT: Kenneth W. Dobie
; TITLE OF INVENTION: ANTISENSE MODULATION OF HYPOTHETICAL TUMOR ENDOTHELIAL MARKER EXP
; FILE REFERENCE: RTS-0369
; CURRENT APPLICATION NUMBER: US/10/174.020
; CURRENT FILING DATE: 2002-06-17
; NUMBER OF SEQ ID NOS: 149
; SEQ ID NO 138
; LENGTH: 20
; TYPE: DNA
; ORGANISM: H. sapiens
; FEATURE:
US-10-174-020-138

Query Match          3.5%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 1.9e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 362 GGCCGACAGGAAGGAACG 380
Db 1 GGCCACAGGAAGGAACG 19
```

```
RESULT 230
US-10-714-195-84/c
; Sequence 84, Application US/10714195
; Publication No. US20050019785A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Joffre
; APPLICANT: Cronin, Maureen
; APPLICANT: Shak, Steve
; APPLICANT: Baselga, Jose
; TITLE OF INVENTION: GENE EXPRESSION PROFILING OF EGFR
; TITLE OF INVENTION: POSITIVE CANCER
; FILE REFERENCE: 39740-0005
; CURRENT APPLICATION NUMBER: US/10/714.195
; CURRENT FILING DATE: 2003-11-14
; PRIOR APPLICATION NUMBER: 60/427090
; PRIOR FILING DATE: 2003-11-15
; NUMBER OF SEQ ID NOS: 372
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 84
; LENGTH: 79
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-714-195-84

Query Match          3.5%; Score 15.8; DB 1; Length 79;
Best Local Similarity 54.2%; Pred. No. 1.9e+02;
Matches 32; Conservative 0; Mismatches 27; Indels 0; Gaps 0;

Qy 358 TTCAGGCCGAGGAGGACGAGTCGCCGCGCGCGCGGATTCCTGAGCT 416
Db 65 TCCTGGGTGCACGTCGCCACAGCTCAGGGAATCGCGCGCGGAGACTCGTCCGTT 7

RESULT 231
US-10-071-179-76
; Sequence 76, Application US/10071179
; Publication No. US20030108882A1
; GENERAL INFORMATION:
; APPLICANT: Bougueleret, Lydie
; TITLE OF INVENTION: A NUCLEIC ACID ENCODING A RETINOBLASTOMA BINDING PROTEIN (RBP-7)
; TITLE OF INVENTION: AND POLYMORPHIC MARKERS ASSOCIATED WITH SAID NUCLEIC ACID.
; FILE REFERENCE: GENSET.031A
; CURRENT APPLICATION NUMBER: US/10/071.179
; CURRENT FILING DATE: 2002-02-07
; PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: 09/345.882
; PRIOR FILING DATE: EARLIER FILING DATE: 1999-06-30
; PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: US 60/091.315
; PRIOR FILING DATE: EARLIER FILING DATE: 1998-06-30
; PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: US 60/111.909
; PRIOR FILING DATE: EARLIER FILING DATE: 1998-12-10
; NUMBER OF SEQ ID NOS: 140
; SOFTWARE: Patent.pm
; SEQ ID NO 76
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; NAME/KEY: primer_bind
; LOCATION: 1..20
; OTHER INFORMATION: upstream amplification primer for SEQ 34, SEQ 55, SEQ 35, SEQ 56
US-10-071-179-76

Query Match          3.4%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 2.1e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 166 CAAACAAAAAATGTCAG 182
Db 1 CAAACAATAAATGTCAG 17
```

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RESULT 232
US-10-126-704-76
; Sequence 76, Application US/10126704
; Publication No. US20030170647A1
; GENERAL INFORMATION:
; APPLICANT: Bougueleret, Lydie
; TITLE OF INVENTION: A NUCLEIC ACID ENCODING A RETINOBLASTOMA BINDING PROTEIN (RBP-7)
; TITLE OF INVENTION: AND POLYMORPHIC MARKERS ASSOCIATED WITH SAID NUCLEIC ACID.
; FILE REFERENCE: 44.US5.DIV
; CURRENT APPLICATION NUMBER: US/10/126,704
; CURRENT FILING DATE: 2002-04-20
; PRIOR APPLICATION NUMBER: US 60/091,315
; PRIOR FILING DATE: 1998-06-30
; PRIOR APPLICATION NUMBER: US 60/111,909
; PRIOR FILING DATE: 1998-12-10
; NUMBER OF SEQ ID NOS: 140
; SOFTWARE: Patent.pm
; SEQ ID NO 76
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; NAME/KEY: primer_bind
; LOCATION: 1..20
; OTHER INFORMATION: upstream amplification primer for SEQ 34, SEQ 55, SEQ 35, SEQ 56
US-10-126-704-76

Query Match          3.4%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 2.1e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 166 CAACAAATAAATGTCAG 182
Db 1 CAACAAATAAATGTCAG 17

RESULT 233
US-10-224-005-154
; Sequence 154, Application US/10224005
; Publication No. US20030143732A1
; GENERAL INFORMATION:
; APPLICANT: McSwiggen, James
; APPLICANT: Fosnaugh, Kathy
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Adenosine A1 Receptor (AD
; TITLE OF INVENTION: Gene Expression Using Short Interfering RNA
; FILE REFERENCE: 900/041 (MBHB01-1110-A)
; CURRENT APPLICATION NUMBER: US/10/224,005
; CURRENT FILING DATE: 2002-08-20
; PRIOR APPLICATION NUMBER: US 60/315,315
; PRIOR FILING DATE: 2001-08-28
; NUMBER OF SEQ ID NOS: 347
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 154
; LENGTH: 19
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Target sequence/siNA sense x
US-10-224-005-154

Query Match          3.3%; Score 14.8; DB 1; Length 19;
Best Local Similarity 77.8%; Pred. No. 2.2e+02;
Matches 14; Conservative 2; Mismatches 2; Indels 0; Gaps 0;

QY 21 GGGAGGGGTGTGCGCAT 38
Db 1 GGGAGGGGAGGUGCGCG 18

RESULT 234
US-10-224-005-315/c
; Sequence 315, Application US/10224005

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; Publication No. US20030143732A1
; GENERAL INFORMATION:
; APPLICANT: Ribozyne Pharmaceuticals, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Fosnaugh, Kathy
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Adenosine A1 Receptor (AD
; TITLE OF INVENTION: Gene Expression Using Short Interfering RNA
; FILE REFERENCE: 900/041 (MBHB01-1110-A)
; CURRENT APPLICATION NUMBER: US/10/224,005
; CURRENT FILING DATE: 2002-08-20
; PRIOR APPLICATION NUMBER: US 60/315,315
; PRIOR FILING DATE: 2001-08-28
; NUMBER OF SEQ ID NOS: 347
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 315
; LENGTH: 19
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
US-10-224-005-315

Query Match          3.3%; Score 14.8; DB 1; Length 19;
Best Local Similarity 88.9%; Pred. No. 2.2e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 21 GGGAGGGGTGTGCGCAT 38
Db 19 GGGAGGGGAGGTGCGCGT 2

RESULT 235
US-10-091-625-4
; Sequence 4, Application US/10091625
; Publication No. US20030170636A1
; GENERAL INFORMATION:
; APPLICANT: Susan M. Freier
; TITLE OF INVENTION: ANTISENSE MODULATION OF JAGGED 2 EXPRESSION
; FILE REFERENCE: RTS-0244
; CURRENT APPLICATION NUMBER: US/10/091,625
; CURRENT FILING DATE: 2002-03-05
; NUMBER OF SEQ ID NOS: 90
; SEQ ID NO 4
; LENGTH: 16
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: PCR Primer
US-10-091-625-4

Query Match          3.2%; Score 14.4; DB 1; Length 16;
Best Local Similarity 93.8%; Pred. No. 1.7e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 265 CCCGGGGCTTCTCCGG 280
Db 1 CCCAGGGCTTCTCCGG 16

RESULT 236
US-10-096-399A-4
; Sequence 4, Application US/10096399A
; Publication No. US20030185829A1
; GENERAL INFORMATION:
; APPLICANT: Koller, Erich
; APPLICANT: Shepard, Peter J.
; TITLE OF INVENTION: JAGGED 2 INHIBITORS FOR INDUCING APOPTOSIS
; FILE REFERENCE: ISPH-0860
; CURRENT APPLICATION NUMBER: US/10/096,399A
; CURRENT FILING DATE: 2002-03-12
; NUMBER OF SEQ ID NOS: 91
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 4

```

; LENGTH: 16  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Synthetic PCR primer  
US-10-096-399A-4

Query Match 3.2%; Score 14.4; DB 1; Length 16;  
Best Local Similarity 93.8%; Pred. No. 1.7e+02;  
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 265 CCCGGGGCTTCTCCGG 280  
||| ||||| |||||  
Db 1 CCCAGGGCTTCTCCGG 16

RESULT 237  
US-10-461-668-4  
; Sequence 4, Application US/10461668  
; Publication No. US20030207839A1  
; GENERAL INFORMATION:  
; APPLICANT: Susan M. Preier  
; TITLE OF INVENTION: ANTISENSE MODULATION OF JAGGED 2 EXPRESSION  
; FILE REFERENCE: RFS-0244  
; CURRENT APPLICATION NUMBER: US/10/461.668  
; CURRENT FILING DATE: 2003-06-13  
; PRIOR APPLICATION NUMBER: US/10/091.625  
; PRIOR FILING DATE: 2002-03-05  
; NUMBER OF SEQ ID NOS: 90  
; SEQ ID NO 4  
; LENGTH: 16  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: PCR Primer  
US-10-461-668-4

Query Match 3.2%; Score 14.4; DB 1; Length 16;  
Best Local Similarity 93.8%; Pred. No. 1.7e+02;  
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 265 CCCGGGGCTTCTCCGG 280  
||| ||||| |||||  
Db 1 CCCAGGGCTTCTCCGG 16

RESULT 238  
US-10-388-263-377  
; Sequence 377, Application US/10388263  
; Publication No. US20030228597A1  
; GENERAL INFORMATION:  
; APPLICANT: Cowseert, Lex M.  
; APPLICANT: Baker, Brenda F.  
; APPLICANT: McNeil, John  
; APPLICANT: Freier, Susan M.  
; APPLICANT: Sasnor, Henri M.  
; APPLICANT: Brooks, Douglas G.  
; APPLICANT: Ohashi, Cara  
; APPLICANT: Wyatt, Jacqueline R.  
; APPLICANT: Borchers, Alexander  
; APPLICANT: Vickers, Timothy A.  
; TITLE OF INVENTION: IDENTIFICATION OF GENETIC TARGETS FOR  
; MODULATION BY OLIGONUCLEOTIDES AND  
; GENERATION OF OLIGONUCLEOTIDES FOR GENE MODULATION  
; FILE REFERENCE: ISIS-4503  
; CURRENT APPLICATION NUMBER: US/10/388.263  
; CURRENT FILING DATE: 2003-03-12  
; NUMBER OF SEQ ID NOS: 947  
; SOFTWARE: FastSeq for Windows Version 4.0  
; SEQ ID NO 377  
; LENGTH: 16  
; TYPE: DNA  
; ORGANISM: Artificial Sequence

; FEATURE:  
; OTHER INFORMATION: PCR Primer  
US-10-388-263-377

Query Match 3.2%; Score 14.4; DB 1; Length 16;  
Best Local Similarity 93.8%; Pred. No. 1.7e+02;  
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 265 CCCGGGGCTTCTCCGG 280  
||| ||||| |||||  
Db 1 CCCAGGGCTTCTCCGG 16

RESULT 239  
US-09-864-785-145  
; Sequence 145, Application US/09864785  
; Patent No. US20020177568A1  
; GENERAL INFORMATION:  
; APPLICANT: Ribozyme Pharmaceuticals, Inc.  
; APPLICANT: Stinchcomb, Dan  
; APPLICANT: Draper, Ken  
; APPLICANT: McSwiggen, Jim  
; TITLE OF INVENTION: Enzymatic Nucleic Acid Treatment of Diseases or Conditions Related  
; FILE REFERENCE: 400/022 (MBHB00-812-D)  
; CURRENT APPLICATION NUMBER: US/09/864,785  
; CURRENT FILING DATE: 2001-05-23  
; NUMBER OF SEQ ID NOS: 3929  
; SOFTWARE: PatentIn version 3.0  
; SEQ ID NO 145  
; LENGTH: 17  
; TYPE: RNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Description of Artificial Sequence: Nucleic Acid  
US-09-864-785-145

Query Match 3.2%; Score 14.4; DB 1; Length 17;  
Best Local Similarity 75.0%; Pred. No. 1.9e+02;  
Matches 12; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

QY 131 CCTCGCGCTCGCGCT 146  
||| ||||| |||||  
Db 2 CCUCGCGCGCGCGCCU 17

RESULT 240  
US-09-864-785-146  
; Sequence 146, Application US/09864785  
; Patent No. US20020177568A1  
; GENERAL INFORMATION:  
; APPLICANT: Ribozyme Pharmaceuticals, Inc.  
; APPLICANT: Stinchcomb, Dan  
; APPLICANT: Draper, Ken  
; APPLICANT: McSwiggen, Jim  
; TITLE OF INVENTION: Enzymatic Nucleic Acid Treatment of Diseases or Conditions Related  
; FILE REFERENCE: 400/022 (MBHB00-812-D)  
; CURRENT APPLICATION NUMBER: US/09/864,785  
; CURRENT FILING DATE: 2001-05-23  
; NUMBER OF SEQ ID NOS: 3929  
; SOFTWARE: PatentIn version 3.0  
; SEQ ID NO 146  
; LENGTH: 17  
; TYPE: RNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Description of Artificial Sequence: Nucleic Acid  
US-09-864-785-146

Query Match 3.2%; Score 14.4; DB 1; Length 17;  
Best Local Similarity 75.0%; Pred. No. 1.9e+02;  
Matches 12; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

Qy 131 CCTCGCCTGCGCCT 146  
Db 1 CCUCCGCCUCCGCCU 16

RESULT 241  
US-10-138-674-7502/c  
; Sequence 7502, Application US/10138674  
; Publication No. US20040077565A1  
; GENERAL INFORMATION:  
; APPLICANT: Ribozyne Pharmaceuticals, Inc.  
; APPLICANT: Pavco, Pam  
; APPLICANT: McSwiggen, Jim  
; APPLICANT: Stinchcomb, Dan  
; APPLICANT: Escobedo, Jaime  
; TITLE OF INVENTION: Method and Reagent for the Treatment of Diseases or Conditions Re  
; TITLE OF INVENTION: Levels of Vascular Endothelial Growth Factor Receptor  
; FILE REFERENCE: MBH00-876-N (400/049)  
; CURRENT FILING DATE: 2002-05-03  
; NUMBER OF SEQ ID NOS: 20822  
; SOFTWARE: PatentIn version 3.0  
; SEQ ID NO 7502  
; LENGTH: 17  
; TYPE: RNA  
; ORGANISM: Homo sapiens  
US-10-138-674-7502

Query Match 3.2%; Score 14.4; DB 1; Length 17;  
Best Local Similarity 93.8%; Pred. No. 1.9e+02;  
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 28 GTGTGGCCATTTC 43  
Db 16 GTGTGGCCATTTC 1

RESULT 242  
US-10-287-949A-7502/c  
; Sequence 7502, Application US/10287949A  
; Publication No. US20040102389A1  
; GENERAL INFORMATION:  
; APPLICANT: Ribozyne Pharmaceuticals, Inc.  
; APPLICANT: Pavco, Pam  
; APPLICANT: McSwiggen, Jim  
; APPLICANT: Stinchcomb, Dan  
; APPLICANT: Escobedo, Jaime  
; TITLE OF INVENTION: Method and Reagent for the Treatment of Diseases or Conditions Re  
; TITLE OF INVENTION: Levels of Vascular Endothelial Growth Factor Receptor  
; FILE REFERENCE: MBH00-876-N (400/049)  
; CURRENT APPLICATION NUMBER: US/10/287,949A  
; CURRENT FILING DATE: 2003-04-11  
; NUMBER OF SEQ ID NOS: 20822  
; SOFTWARE: PatentIn version 3.0  
; SEQ ID NO 7502  
; LENGTH: 17  
; TYPE: RNA  
; ORGANISM: Homo sapiens  
US-10-287-949A-7502

Query Match 3.2%; Score 14.4; DB 1; Length 17;  
Best Local Similarity 93.8%; Pred. No. 1.9e+02;  
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 28 GTGTGGCCATTTC 43  
Db 16 GTGTGGCCATTTC 1

RESULT 243  
US-10-712-633-491/c  
; Sequence 491, Application US/10712633

; Publication No. US20040220128A1  
; GENERAL INFORMATION:  
; APPLICANT: Ribozyne Pharmaceuticals, Inc.  
; APPLICANT: Pavco, Pamela  
; APPLICANT: Sandberg, Jennifer  
; APPLICANT: Gordon, Gilad  
; APPLICANT: McSwiggen, James  
; APPLICANT: Stinchcomb, Dan  
; TITLE OF INVENTION: NUCLEIC ACID BASED MODULATION OF VASCULAR ENDOTHELIAL GROWTH FACTO  
; FILE REFERENCE: MBH02-325PCT (400/047)  
; CURRENT APPLICATION NUMBER: US/10/712,633  
; CURRENT FILING DATE: 2003-11-13  
; PRIOR APPLICATION NUMBER: US 60/005,974  
; PRIOR FILING DATE: 1995-10-26  
; PRIOR APPLICATION NUMBER: US 08/584,040  
; PRIOR FILING DATE: 1996-01-08  
; PRIOR APPLICATION NUMBER: US 09/371,772  
; PRIOR FILING DATE: 1999-08-10  
; PRIOR APPLICATION NUMBER: US 09/708,690  
; PRIOR FILING DATE: 2000-11-07  
; PRIOR APPLICATION NUMBER: US 09/870,161  
; PRIOR FILING DATE: 2001-05-29  
; PRIOR APPLICATION NUMBER: US 60/334,461  
; PRIOR FILING DATE: 2001-11-30  
; PRIOR APPLICATION NUMBER: US 10/138,674  
; PRIOR FILING DATE: 2002-05-03  
; NUMBER OF SEQ ID NOS: 5989  
; SOFTWARE: PatentIn version 3.0  
; SEQ ID NO 491  
; LENGTH: 17  
; TYPE: RNA  
; ORGANISM: Homo Sapiens  
US-10-712-633-491

Query Match 3.2%; Score 14.4; DB 1; Length 17;  
Best Local Similarity 93.8%; Pred. No. 1.9e+02;  
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 28 GTGTGGCCATTTC 43  
Db 16 GTGTGGCCATTTC 1

RESULT 244  
US-10-054-387-24  
; Sequence 24, Application US/10054387  
; Publication No. US20030054365A1  
; GENERAL INFORMATION:  
; APPLICANT: Qiu, Minzhen  
; APPLICANT: Humphreys, Robert  
; TITLE OF INVENTION: CANCER CELL VACCINE  
; FILE REFERENCE: U.S. Application 09/205,995, (CIP)  
; CURRENT APPLICATION NUMBER: US/10/054,387  
; CURRENT FILING DATE: 2002-01-22  
; PRIOR APPLICATION NUMBER: 09/036,746  
; PRIOR FILING DATE: 1998-03-09  
; PRIOR APPLICATION NUMBER: 08/661,627  
; PRIOR FILING DATE: 1996-06-11  
; NUMBER OF SEQ ID NOS: 79  
; SOFTWARE: PatentIn Ver. 2.0  
; SEQ ID NO 24  
; LENGTH: 18  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Description of Artificial Sequence: antisense  
; OTHER INFORMATION: oligonucleotide corresponding to a specific region  
; OTHER INFORMATION: of the mouse Ii gene.  
US-10-054-387-24

Query Match 3.2%; Score 14.4; DB 1; Length 18;



QY 106 CGCTGACTTTTCAGCGG 122  
Db 1 CGCUGCCUUCACUGG 17

## RESULT 248

US-09-848-754A-3581  
; Sequence 3581, Application US/09848754A  
; Publication No. US20030073207A1

; GENERAL INFORMATION:  
; APPLICANT: Ribozyme Pharmaceuticals, Inc.  
; TITLE OF INVENTION: Enzymatic Nucleic Acid Treatment of Diseases or Conditions Related to Growth Factor Receptors  
; FILE REFERENCE: MBH00-958-I (400/018)  
; CURRENT APPLICATION NUMBER: US/09/848,754A  
; CURRENT FILING DATE: 2001-05-03  
; NUMBER OF SEQ ID NOS: 9645  
; SOFTWARE: PatentIn version 3.0  
; SEQ ID NO 3581  
; LENGTH: 17  
; TYPE: RNA  
; ORGANISM: Homo sapiens  
US-09-848-754A-3581

Query Match 3.1%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 2.2e+02;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 231 CAGCCCCCGAACCCCGC 247  
Db 1 CAGCCUCUGAACCCCGC 17

## RESULT 249

US-09-930-423-5/c  
; Sequence 5, Application US/09930423  
; Publication No. US20030092003A1

; GENERAL INFORMATION:  
; APPLICANT: Ribozyme Pharmaceuticals, Inc.  
; APPLICANT: Blatt, Larry  
; APPLICANT: McSwiggen, Jim  
; TITLE OF INVENTION: Method and Reagent for the Treatment of Alzheimer's Disease  
; FILE REFERENCE: MBH00,918-A 400/027  
; CURRENT APPLICATION NUMBER: US/09/930,423  
; CURRENT FILING DATE: 2001-08-15  
; NUMBER OF SEQ ID NOS: 4553  
; SOFTWARE: PatentIn version 3.0  
; SEQ ID NO 5  
; LENGTH: 17  
; TYPE: RNA  
; ORGANISM: Homo Sapiens  
US-09-930-423-5

Query Match 3.1%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 2.2e+02;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 15 GCGCCTGGGAGGGGTGG 31  
Db 17 GCGGCTGGGAGGGGCGG 1

## RESULT 250

US-09-930-423-336/c  
; Sequence 336, Application US/09930423  
; Publication No. US20030092003A1

; GENERAL INFORMATION:  
; APPLICANT: Ribozyme Pharmaceuticals, Inc.  
; APPLICANT: Blatt, Larry  
; APPLICANT: McSwiggen, Jim  
; TITLE OF INVENTION: Method and Reagent for the Treatment of Alzheimer's Disease  
; FILE REFERENCE: MBH00,918-A 400/027  
; CURRENT APPLICATION NUMBER: US/09/930,423

; CURRENT FILING DATE: 2001-08-15  
; NUMBER OF SEQ ID NOS: 4553  
; SOFTWARE: PatentIn version 3.0  
; SEQ ID NO 336  
; LENGTH: 17  
; TYPE: RNA  
; ORGANISM: Homo Sapiens  
US-09-930-423-336

Query Match 3.1%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 2.2e+02;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 12 GGTGGCCCTGGGAGGGG 28  
Db 17 GCGGGGCTGGGAGGGG 1

## RESULT 251

US-09-930-423-1471  
; Sequence 1471, Application US/09930423  
; Publication No. US20030092003A1

; GENERAL INFORMATION:  
; APPLICANT: Ribozyme Pharmaceuticals, Inc.  
; APPLICANT: Blatt, Larry  
; APPLICANT: McSwiggen, Jim  
; TITLE OF INVENTION: Method and Reagent for the Treatment of Alzheimer's Disease  
; FILE REFERENCE: MBH00,918-A 400/027  
; CURRENT APPLICATION NUMBER: US/09/930,423  
; CURRENT FILING DATE: 2001-08-15  
; NUMBER OF SEQ ID NOS: 4553  
; SOFTWARE: PatentIn version 3.0  
; SEQ ID NO 1471  
; LENGTH: 17  
; TYPE: RNA  
; ORGANISM: Homo Sapiens  
US-09-930-423-1471

Query Match 3.1%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 2.2e+02;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 242 CCGCGCTGGAGCGCGC 258  
Db 1 CCGCGCGGAGCGCGC 17

## RESULT 252

US-09-930-423-1472  
; Sequence 1472, Application US/09930423  
; Publication No. US20030092003A1

; GENERAL INFORMATION:  
; APPLICANT: Ribozyme Pharmaceuticals, Inc.  
; APPLICANT: Blatt, Larry  
; APPLICANT: McSwiggen, Jim  
; TITLE OF INVENTION: Method and Reagent for the Treatment of Alzheimer's Disease  
; FILE REFERENCE: MBH00,918-A 400/027  
; CURRENT APPLICATION NUMBER: US/09/930,423  
; CURRENT FILING DATE: 2001-08-15  
; NUMBER OF SEQ ID NOS: 4553  
; SOFTWARE: PatentIn version 3.0  
; SEQ ID NO 1472  
; LENGTH: 17  
; TYPE: RNA  
; ORGANISM: Homo Sapiens  
US-09-930-423-1472

Query Match 3.1%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 2.2e+02;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 243 CCGCGCTGGAGCGCGC 259  
Db 1 CCGCGCGGAGCGCGC 17



```
Db 1 CCCCGCGGAGCCCGCG 17

RESULT 253
US-09-827-395A-630
; Sequence 630, Application US/09827395A
; Publication No. US20030113891A1
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals, Inc.
; APPLICANT: Lawrence Blatt
; APPLICANT: James McSwiggen
; APPLICANT: Bharat Chowrira
; TITLE OF INVENTION: Method and Reagent for the Inhibition of NOGO and NOGO Receptor G
; FILE REFERENCE: MBH00-878-C (400/017)
; CURRENT APPLICATION NUMBER: US/09/827,395A
; CURRENT FILING DATE: 2001-04-05
; PRIOR APPLICATION NUMBER: 09/780,533
; PRIOR FILING DATE: 2001-02-09
; PRIOR APPLICATION NUMBER: 60/181,797
; PRIOR FILING DATE: 2000-02-11
; NUMBER OF SEQ ID NOS: 2617
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 630
; LENGTH: 17
; TYPE: RNA
; ORGANISM: Homo sapiens
US-09-827-395A-630

Query Match 3.1%; Score 13.8; DB 1; Length 17;
Best Local Similarity 76.5%; Pred. No. 2.2e+02;
Matches 13; Conservative 2; Mismatches 2; Indels 0; Gaps 0;

Qy 263 GGCCCGGGCGCTTCGCC 279
Db 1 GGCCCGGGCGGUGUCCG 17

RESULT 254
US-09-740-332-800
; Sequence 800, Application US/09740332
; Publication No. US20030125270A1
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals Inc.
; TITLE OF INVENTION: Enzymatic Nucleic Acid Treatment of Diseases or Conditions Related
; FILE REFERENCE: Hepatitis C Virus Infection
; FILE REFERENCE: RPI 400/003
; CURRENT APPLICATION NUMBER: US/09/740,332
; CURRENT FILING DATE: 2001-03-26
; NUMBER OF SEQ ID NOS: 9704
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 800
; LENGTH: 17
; TYPE: RNA
; ORGANISM: artificial sequence
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION:
; OTHER INFORMATION: oligonucleotide substrate
US-09-740-332-800

Query Match 3.1%; Score 13.8; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 2.2e+02;
Matches 14; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

Qy 432 AGGACTCGGCTCACACA 448
Db 1 AGGACUGGGCCACACA 17

RESULT 255
US-09-740-332-3130/c
; Sequence 3130, Application US/09740332
; Publication No. US20030125270A1
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals, Inc.
; APPLICANT: Von Carlowitz, Ira
; APPLICANT: McSwiggen, Jim
; APPLICANT: Hamblin, Paul
; APPLICANT: Ellis, Jonathan
; TITLE OF INVENTION: Method and Reagent for the Inhibition of Grb-2-related with Insert
```

```
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals Inc.
; TITLE OF INVENTION: Enzymatic Nucleic Acid Treatment of Diseases or Conditions Related
; FILE REFERENCE: Hepatitis C Virus Infection
; FILE REFERENCE: RPI 400/003
; CURRENT APPLICATION NUMBER: US/09/740,332
; CURRENT FILING DATE: 2001-03-26
; NUMBER OF SEQ ID NOS: 9704
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 3130
; LENGTH: 17
; TYPE: RNA
; ORGANISM: artificial sequence
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION:
; OTHER INFORMATION: oligonucleotide substrate
US-09-740-332-3130

Query Match 3.1%; Score 13.8; DB 1; Length 17;
Best Local Similarity 88.2%; Pred. No. 2.2e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 20 TGGAGGGGTGCTGGCC 36
Db 17 TGGAGGGGTGCTGGCC 1

RESULT 256
US-09-792-818-129/c
; Sequence 129, Application US/09792818
; Publication No. US20030134806A1
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals, Inc.
; APPLICANT: Jarvis, Thale
; APPLICANT: Von Carlowitz, Ira
; APPLICANT: McSwiggen, Jim
; APPLICANT: Hamblin, Paul
; APPLICANT: Ellis, Jonathan
; TITLE OF INVENTION: Method and Reagent for the Inhibition of Grb-2-related with Insert
; FILE REFERENCE: MBH00-901-A (400/013)
; CURRENT APPLICATION NUMBER: US/09/792,818
; CURRENT FILING DATE: 2001-02-23
; NUMBER OF SEQ ID NOS: 2304
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 129
; LENGTH: 17
; TYPE: RNA
; ORGANISM: Homo sapiens
US-09-792-818-129

Query Match 3.1%; Score 13.8; DB 1; Length 17;
Best Local Similarity 88.2%; Pred. No. 2.2e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 201 CTCCTGGGACCTCCGG 217
Db 17 CTCCTGGGACCTCCGG 1

RESULT 257
US-09-792-818-330/c
; Sequence 330, Application US/09792818
; Publication No. US20030134806A1
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals, Inc.
; APPLICANT: Jarvis, Thale
; APPLICANT: Von Carlowitz, Ira
; APPLICANT: McSwiggen, Jim
; APPLICANT: Hamblin, Paul
; APPLICANT: Ellis, Jonathan
; TITLE OF INVENTION: Method and Reagent for the Inhibition of Grb-2-related with Insert
```

; TITLE OF INVENTION: (GRID) Gene  
; FILE REFERENCE: MEHB00-901-A (400/013)  
; CURRENT APPLICATION NUMBER: US/09/792.818  
; CURRENT FILING DATE: 2001-02-23  
; NUMBER OF SEQ ID NOS: 2304  
; SOFTWARE: PatentIn version 3.0  
; SEQ ID NO 330  
; LENGTH: 17  
; TYPE: RNA  
; ORGANISM: Homo sapiens  
US-09-792-818-330

Query Match 3.1%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 2.2e+02;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 200 CCTCCCGGGGACTGGC 216  
Db 17 CCTCCCTGGGACCTCG 1

## RESULT 258

US-09-745-237A-5/c  
; Sequence 5, Application US/09745237A  
; Publication No. US20030143708A1  
; GENERAL INFORMATION:  
; APPLICANT: Ribozyme Pharmaceuticals, Inc.  
; APPLICANT: Blatt, Larry  
; APPLICANT: McSwiggen, Jim

; TITLE OF INVENTION: Method and Reagent for the Treatment of Alzheimer's Disease  
; FILE REFERENCE: 400/007 (MEHB00-918-A)  
; CURRENT APPLICATION NUMBER: US/09/745,237A  
; CURRENT FILING DATE: 2002-04-15  
; NUMBER OF SEQ ID NOS: 4550  
; SOFTWARE: PatentIn version 3.0  
; SEQ ID NO 5  
; LENGTH: 17  
; TYPE: RNA  
; ORGANISM: Homo sapiens  
US-09-745-237A-5

Query Match 3.1%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 2.2e+02;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 15 GGGCTGGGAGGGTGG 31  
Db 17 GGGCTGGGAGGGGCG 1

## RESULT 259

US-09-745-237A-336/c  
; Sequence 336, Application US/09745237A  
; Publication No. US20030143708A1  
; GENERAL INFORMATION:  
; APPLICANT: Ribozyme Pharmaceuticals, Inc.  
; APPLICANT: Blatt, Larry  
; APPLICANT: McSwiggen, Jim

; TITLE OF INVENTION: Method and Reagent for the Treatment of Alzheimer's Disease  
; FILE REFERENCE: 400/007 (MEHB00-918-A)  
; CURRENT APPLICATION NUMBER: US/09/745,237A  
; CURRENT FILING DATE: 2002-04-15  
; NUMBER OF SEQ ID NOS: 4550  
; SOFTWARE: PatentIn version 3.0  
; SEQ ID NO 336  
; LENGTH: 17  
; TYPE: RNA  
; ORGANISM: Homo sapiens  
US-09-745-237A-336

Query Match 3.1%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 2.2e+02;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 12 GGTGGGCTGGGAGGG 28  
Db 17 GCGGGGCTGGGAGGG 1

## RESULT 260

US-09-745-237A-1471  
; Sequence 1471, Application US/09745237A  
; Publication No. US20030143708A1  
; GENERAL INFORMATION:  
; APPLICANT: Ribozyme Pharmaceuticals, Inc.  
; APPLICANT: Blatt, Larry  
; APPLICANT: McSwiggen, Jim

; TITLE OF INVENTION: Method and Reagent for the Treatment of Alzheimer's Disease  
; FILE REFERENCE: 400/007 (MEHB00-918-A)  
; CURRENT APPLICATION NUMBER: US/09/745,237A  
; CURRENT FILING DATE: 2002-04-15  
; NUMBER OF SEQ ID NOS: 4550  
; SOFTWARE: PatentIn version 3.0  
; SEQ ID NO 1471  
; LENGTH: 17  
; TYPE: RNA  
; ORGANISM: Homo sapiens  
US-09-745-237A-1471

Query Match 3.1%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 2.2e+02;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 242 CCCCCTGGAGGCGCG 258  
Db 1 CCCCCTGGAGGCGCG 17

## RESULT 261

US-09-745-237A-1472  
; Sequence 1472, Application US/09745237A  
; Publication No. US20030143708A1  
; GENERAL INFORMATION:  
; APPLICANT: Ribozyme Pharmaceuticals, Inc.  
; APPLICANT: Blatt, Larry  
; APPLICANT: McSwiggen, Jim

; TITLE OF INVENTION: Method and Reagent for the Treatment of Alzheimer's Disease  
; FILE REFERENCE: 400/007 (MEHB00-918-A)  
; CURRENT APPLICATION NUMBER: US/09/745,237A  
; CURRENT FILING DATE: 2002-04-15  
; NUMBER OF SEQ ID NOS: 4550  
; SOFTWARE: PatentIn version 3.0  
; SEQ ID NO 1472  
; LENGTH: 17  
; TYPE: RNA  
; ORGANISM: Homo sapiens  
US-09-745-237A-1472

Query Match 3.1%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 2.2e+02;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 243 CCGGCTGGAGGCGCG 259  
Db 1 CCGGCTGGAGGCGCG 17

## RESULT 262

US-09-817-879-800  
; Sequence 800, Application US/09817879  
; Publication No. US20030171311A1  
; GENERAL INFORMATION:  
; APPLICANT: Ribozyme Pharmaceuticals Inc.  
; TITLE OF INVENTION: Enzymatic Nucleic Acid Treatment of Diseases or Conditions Related

; FILE REFERENCE: MEHB00-801-F  
; TITLE OF INVENTION: Hepatitis C Virus Infection

; CURRENT APPLICATION NUMBER: US/09/817.879  
; CURRENT FILING DATE: 2001-03-26  
; NUMBER OF SEQ ID NOS: 9703  
; SOFTWARE: PatentIn version 3.0  
; SEQ ID NO 800  
; LENGTH: 17  
; TYPE: RNA  
; ORGANISM: artificial sequence  
; FEATURE:  
; NAME/KEY: misc\_feature  
; LOCATION:  
; OTHER INFORMATION: oligonucleotide substrate  
US-09-817-879-800

Query Match 3.1%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 82.4%; Pred. No. 2.2e+02;  
Matches 14; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

Qy 432 AGGACTCGGTCACACA 448  
Db 1 AGGACUGGGCCACACA 17  
|||||: ||| |||||

## RESULT 263

US-09-817-879-3130/c  
; Sequence 3130, Application US/09817879  
; Publication No. US2003017311A1  
; GENERAL INFORMATION:  
; APPLICANT: Ribozyme Pharmaceuticals, Inc.  
; TITLE OF INVENTION: Enzymatic Nucleic Acid Treatment of Diseases or Conditions Related to Hepatitis C Virus Infection  
; FILE REFERENCE: MBH00-801-F  
; CURRENT APPLICATION NUMBER: US/09/817.879  
; CURRENT FILING DATE: 2001-03-26  
; NUMBER OF SEQ ID NOS: 9703  
; SOFTWARE: PatentIn version 3.0  
; SEQ ID NO 3130  
; LENGTH: 17  
; TYPE: RNA  
; ORGANISM: artificial sequence  
; FEATURE:  
; NAME/KEY: misc\_feature  
; LOCATION:  
; OTHER INFORMATION: oligonucleotide substrate  
US-09-817-879-3130

Query Match 3.1%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 2.2e+02;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 20 TGGGAGGGTGGTGGCC 36  
Db 17 TGGGAGGGTGGTGGCC 1  
|||||: ||| |||||

## RESULT 264

US-10-156-306-5871  
; Sequence 5871, Application US/10156306  
; Publication No. US20030119017A1  
; GENERAL INFORMATION:  
; APPLICANT: Ribozyme Pharmaceuticals, Inc.  
; APPLICANT: McSwiggen, James  
; TITLE OF INVENTION: Enzymatic Nucleic Acid Treatment of Diseases or Conditions Related to Hepatitis C Virus Infection  
; FILE REFERENCE: MBH01-664-A (400/050)  
; CURRENT APPLICATION NUMBER: US/10/156.306  
; CURRENT FILING DATE: 2002-05-28  
; NUMBER OF SEQ ID NOS: 8013  
; SOFTWARE: PatentIn version 3.0  
; SEQ ID NO 5871  
; LENGTH: 17  
; TYPE: RNA  
; ORGANISM: Homo sapiens

## US-10-156-306-5871

Query Match 3.1%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 76.5%; Pred. No. 2.2e+02;  
Matches 13; Conservative 2; Mismatches 2; Indels 0; Gaps 0;

Qy 246 GCGTGGAGCGCGGTC 262  
Db 1 GCGUGGAGCGCGGCUC 17  
||: |||||: ||

## RESULT 265

US-10-156-306-5872  
; Sequence 5872, Application US/10156306  
; Publication No. US20030119017A1  
; GENERAL INFORMATION:  
; APPLICANT: Ribozyme Pharmaceuticals, Inc.  
; APPLICANT: McSwiggen, James  
; TITLE OF INVENTION: Enzymatic Nucleic Acid Treatment of Diseases or Conditions Related to Hepatitis C Virus Infection  
; FILE REFERENCE: MBH01-664-A (400/050)  
; CURRENT APPLICATION NUMBER: US/10/156.306  
; CURRENT FILING DATE: 2002-05-28  
; NUMBER OF SEQ ID NOS: 8013  
; SOFTWARE: PatentIn version 3.0  
; SEQ ID NO 5872  
; LENGTH: 17  
; TYPE: RNA  
; ORGANISM: Homo sapiens  
US-10-156-306-5872

Query Match 3.1%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 76.5%; Pred. No. 2.2e+02;  
Matches 13; Conservative 2; Mismatches 2; Indels 0; Gaps 0;

Qy 249 TGGAGCGCGGTCGCGC 265  
Db 1 UGGAGCGCGCGCCGC 17  
: |||||: |||

## RESULT 266

US-10-230-006-2217/c  
; Sequence 2217, Application US/10230006  
; Publication No. US20030191077A1  
; GENERAL INFORMATION:  
; APPLICANT: Ribozyme Pharmaceuticals, Inc.  
; APPLICANT: Fossnaugh, Kathy  
; APPLICANT: McSwiggen, Jim  
; TITLE OF INVENTION: METHOD AND REAGENT FOR THE TREATMENT OF ASTHMA AND ALLERGIC CONDITIONS  
; FILE REFERENCE: 400/056 (MBH01-1110)  
; CURRENT APPLICATION NUMBER: US/10/230.006  
; CURRENT FILING DATE: 2002-11-18  
; PRIOR APPLICATION NUMBER: US 60/315,315  
; PRIOR FILING DATE: 2001-08-28  
; NUMBER OF SEQ ID NOS: 2678  
; SOFTWARE: PatentIn version 3.0  
; SEQ ID NO 2217  
; LENGTH: 17  
; TYPE: RNA  
; ORGANISM: Homo sapiens  
US-10-230-006-2217

Query Match 3.1%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 2.2e+02;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 96 CTGTTTTCTCGGTGAC 112  
Db 17 CTGTTTTCTCGGTGAC 1  
|||||: |||||

## RESULT 267

US-10-430-882-630

```
; Sequence 630, Application US/10430882
; Publication No. US20030203870A1
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals, Inc.
; APPLICANT: Lawrence Blatt
; APPLICANT: James McSwiggen
; APPLICANT: Bharat Chowkira
; APPLICANT: Peter Haebelri
; TITLE OF INVENTION: Method and Reagent for the Inhibition of NOGO and NOGO Receptor
; FILE REFERENCE: MBHB00-878-H (400/112)
; CURRENT APPLICATION NUMBER: US/10/430,882
; PRIOR FILING DATE: 2003-05-06
; PRIOR APPLICATION NUMBER: 09/827,395
; PRIOR FILING DATE: 2001-04-05
; PRIOR APPLICATION NUMBER: 09/780,533
; PRIOR FILING DATE: 2001-02-09
; PRIOR APPLICATION NUMBER: PCT/US01/04273
; PRIOR FILING DATE: 2001-02-09
; PRIOR APPLICATION NUMBER: 60/181,797
; PRIOR FILING DATE: 2000-02-11
; PRIOR APPLICATION NUMBER: PCT/US02/10512
; PRIOR FILING DATE: 2002-04-03
; NUMBER OF SEQ ID NOS: 2617
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 630
; LENGTH: 17
; TYPE: RNA
; ORGANISM: Homo sapiens
US-10-430-882-630

Query Match          3.1%; Score 13.8; DB 1; Length 17;
Best Local Similarity 76.5%; Pred. No. 2.2e+02;
Matches 13; Conservative 2; Mismatches 2; Indels 0; Gaps 0;

QY 263 GGGCCGGGGCTTCTCCG 279
Db 1 GGGCCGGGGCGUGUCCG 17

RESULT 268
US-10-712-672-2726/c
; Sequence 2726, Application US/10712672
; Publication No. US20040102413A1
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals, Inc.
; APPLICANT: Chowkira, Bharat
; APPLICANT: McSwiggen, Jim
; TITLE OF INVENTION: Method and Reagent for the Inhibition of Telomerase Enzyme
; FILE REFERENCE: MBHB00-882-C (400/019)
; CURRENT APPLICATION NUMBER: US/10/712,672
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US/09/653,225
; PRIOR FILING DATE: 2000-08-31
; PRIOR APPLICATION NUMBER: 60/197,769
; PRIOR FILING DATE: 2000-04-14
; PRIOR APPLICATION NUMBER: 60/150,713
; PRIOR FILING DATE: 1999-08-31
; NUMBER OF SEQ ID NOS: 5586
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 2726
; LENGTH: 17
; TYPE: RNA
; ORGANISM: Homo sapiens
US-10-712-672-2726

Query Match          3.1%; Score 13.8; DB 1; Length 17;
Best Local Similarity 88.2%; Pred. No. 2.2e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 124 GGAAAGCCTCGGCCCTG 140
Db 17 GGAAAGCCTCGGCCCTG 1
```

```
RESULT 269
US-10-669-841-3393
; Sequence 3393, Application US/10669841
; Publication No. US20040127446A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: Lawrence, Blatt
; APPLICANT: Dennis, Macejak
; APPLICANT: James, McSwiggen
; APPLICANT: David, Morrissey
; APPLICANT: Pamela, Pavco
; APPLICANT: Patrice, Lee
; APPLICANT: Kenneth, Draper
; APPLICANT: Elisabeth, Roberts
; TITLE OF INVENTION: OLIGONUCLEOTIDE MEDIATED INHIBITION OF HEPATITIS B VIRUS AND HEPAT
; FILE REFERENCE: 400/042US (MBHB02-249-E)
; CURRENT APPLICATION NUMBER: US/10/669,841
; CURRENT FILING DATE: 2003-09-23
; PRIOR APPLICATION NUMBER: PCT/US02/09187
; PRIOR FILING DATE: 2002-03-26
; PRIOR APPLICATION NUMBER: US 60/296,876
; PRIOR FILING DATE: 2001-06-08
; PRIOR APPLICATION NUMBER: US 60/335,059
; PRIOR FILING DATE: 2001-10-24
; PRIOR APPLICATION NUMBER: US 60/337,055
; PRIOR FILING DATE: 2001-12-05
; PRIOR APPLICATION NUMBER: US 60/358,580
; PRIOR FILING DATE: 2002-02-20
; PRIOR APPLICATION NUMBER: US 60/363,124
; PRIOR FILING DATE: 2002-03-11
; PRIOR APPLICATION NUMBER: US 09/817,879
; PRIOR FILING DATE: 2001-03-26
; PRIOR APPLICATION NUMBER: US 09/740,332
; PRIOR FILING DATE: 2000-12-18
; PRIOR APPLICATION NUMBER: US 09/611,931
; PRIOR FILING DATE: 2000-07-07
; PRIOR APPLICATION NUMBER: US 09/504,321
; PRIOR FILING DATE: 2000-02-15
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 16207
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 3393
; LENGTH: 17
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Nucleic Acid
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION:
; OTHER INFORMATION: oligonucleotide substrate
US-10-669-841-3393

Query Match          3.1%; Score 13.8; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 2.2e+02;
Matches 14; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 432 AGGACTCGGCTCACACA 448
Db 1 AGGACUGGGCCACACA 17

RESULT 270
US-10-669-841-5723/c
; Sequence 5723, Application US/10669841
; Publication No. US20040127446A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: Lawrence, Blatt
; APPLICANT: Dennis, Macejak
```

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; APPLICANT: James, McSwiggen
; APPLICANT: David, Morrissey
; APPLICANT: Pamela, Pavco
; APPLICANT: Patricia, Lee
; APPLICANT: Kenneth, Draper
; APPLICANT: Elisabeth, Roberts
; TITLE OF INVENTION: OLIGONUCLEOTIDE MEDIATED INHIBITION OF HEPATITIS B VIRUS AND HEPA
; FILE REFERENCE: 400/042US (MEHB02-249-E)
; CURRENT APPLICATION NUMBER: US/10/669,841
; CURRENT FILING DATE: 2003-09-23
; PRIOR APPLICATION NUMBER: PCT/US02/09187
; PRIOR FILING DATE: 2002-03-26
; PRIOR APPLICATION NUMBER: US 60/296,876
; PRIOR FILING DATE: 2001-06-08
; PRIOR APPLICATION NUMBER: US 60/335,059
; PRIOR FILING DATE: 2001-10-24
; PRIOR APPLICATION NUMBER: US 60/337,055
; PRIOR FILING DATE: 2001-12-05
; PRIOR APPLICATION NUMBER: US 60/358,580
; PRIOR FILING DATE: 2002-02-20
; PRIOR APPLICATION NUMBER: US 60/363,124
; PRIOR FILING DATE: 2002-03-11
; PRIOR APPLICATION NUMBER: US 09/817,879
; PRIOR FILING DATE: 2001-03-26
; PRIOR APPLICATION NUMBER: US 09/740,332
; PRIOR FILING DATE: 2000-12-18
; PRIOR APPLICATION NUMBER: US 09/611,931
; PRIOR FILING DATE: 2000-07-07
; PRIOR APPLICATION NUMBER: US 09/504,321
; PRIOR FILING DATE: 2000-02-15
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 16207
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 5723
; LENGTH: 17
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Nucleic Acid
; NAME/KEY: misc_feature
; LOCATION:
; OTHER INFORMATION: oligonucleotide substrate
US-10-669-841-5723

Query Match          3.1%; Score 13.8; DB 1; Length 17;
Best Local Similarity 88.2%; Pred. No. 2.2e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 20 TGGGAGGGGTGGTGCC 36
DB 17 TGGGAGGGGTGGTGCC 1

RESULT 271
US-09-961-077-571
; Sequence 571, Application US/09961077
; Publication No. US20030014775A1
; GENERAL INFORMATION:
; APPLICANT: Zwick, Michael G.
; Edington, Brent E.
; McSwiggen, James A.
; Merlo, Patricia Ann Owens
; Guo, Lining
; Skokut, Thomas A.
; Young, Scott A.
; Folkerts, Otto
; Merlo, Donald J.
; TITLE OF INVENTION: COMPOSITION AND METHODS FOR
; MODULATION OF GENE EXPRESSION
; IN PLANTS
; NUMBER OF SEQUENCES: 1263

CORRESPONDENCE ADDRESS:
ADDRESSEE: Lyon & Lyon
STREET: 633 West Fifth Street
Suite 4700
CITY: Los Angeles
STATE: California
COUNTRY: U.S.A.
ZIP: 90071-2066
COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 MB

COMPUTER: IBM Compatible
OPERATING SYSTEM: IBM P.C. DOS 5.0
SOFTWARE: Word Perfect 5.1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/961,077
FILING DATE: 21-Sep-2001
CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/679,645
FILING DATE: July 12, 1996
APPLICATION NUMBER: 60/001,135
FILING DATE: July 13, 1995
APPLICATION NUMBER: 08/300,726
FILING DATE: September 2, 1994
ATTORNEY/AGENT INFORMATION:
NAME: Warburg, Richard J.
REGISTRATION NUMBER: 32,327
REFERENCE/DOCKET NUMBER: 219/247
TELECOMMUNICATION INFORMATION:
TELEPHONE: (213) 489-1600
TELEFAX: (213) 955-0440
TELEX: 67-3510
INFORMATION FOR SEQ ID NO: 571:
SEQUENCE CHARACTERISTICS:
LENGTH: 18 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
SEQUENCE DESCRIPTION: SEQ ID NO: 571:
US-09-961-077-571

Query Match          3.1%; Score 13.8; DB 1; Length 18;
Best Local Similarity 82.4%; Pred. No. 2.4e+02;
Matches 14; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 134 CGGCGTCGCGCCTTCCA 150
DB 2 CGGCCUGCCGCCGGCCA 18

RESULT 272
US-10-158-160A-27/c
; Sequence 27, Application US/10158160A
; Publication No. US20030059805A1
; GENERAL INFORMATION:
; APPLICANT: RAPPOLD-HOERBRAND, GUDRUN
; APPLICANT: RAO, ERCOLE
; TITLE OF INVENTION: HUMAN GROWTH GENE AND SHORT STATURE GENE REGION
; FILE REFERENCE: 108351-00004
; CURRENT APPLICATION NUMBER: US/10/158,160A
; CURRENT FILING DATE: 2002-08-20
; PRIOR APPLICATION NUMBER: 09/147,699
; PRIOR FILING DATE: 1999-06-24
; PRIOR APPLICATION NUMBER: PCT/EP97/05355
; PRIOR FILING DATE: 1997-09-29
; PRIOR APPLICATION NUMBER: 60/027,633
; PRIOR FILING DATE: 1996-10-01
; PRIOR APPLICATION NUMBER: EP/97100583.0
; PRIOR FILING DATE: 1997-01-16
; NUMBER OF SEQ ID NOS: 55
; SOFTWARE: PatentIn ver. 2.1
; SEQ ID NO 27
```

; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: synthetic
US-10-158-160A-27

Query Match
Best Local Similarity 3.1%; Score 13.8; DB 1; Length 18;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 332 CGGGGGCGAGGCGGAGG 348
Db 17 CGGGGGCGGGCGGGG 1

RESULT 273
US-09-864-785-1488
; Sequence 1488, Application US/09864785
; Patent No. US20020177568A1
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals, Inc.
; APPLICANT: Stinchcomb, Dan
; APPLICANT: Draper, Ken
; APPLICANT: McSwiggen, Jim
; TITLE OF INVENTION: Enzymatic Nucleic Acid Treatment of Diseases or Conditions Related to Hepatitis C Virus Infection
; FILE REFERENCE: Levels of NF-Kappa B
; FILE REFERENCE: 400/022 (MRHB00-812-D)
; CURRENT APPLICATION NUMBER: US/09/864,785
; CURRENT FILING DATE: 2001-05-23
; NUMBER OF SEQ ID NOS: 3929
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 1488
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Nucleic Acid
US-09-864-785-1488

Query Match
Best Local Similarity 3.0%; Score 13.4; DB 1; Length 17;
Matches 11; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

Qy 132 CTCGGCCTGCCGCCT 146
Db 1 CUCCGCCUGCGCCU 15

RESULT 274
US-09-740-332-917
; Sequence 917, Application US/09740332
; Publication No. US20030125270A1
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals Inc.
; TITLE OF INVENTION: Enzymatic Nucleic Acid Treatment of Diseases or Conditions Related to Hepatitis C Virus Infection
; FILE REFERENCE: RPI 400/003
; CURRENT APPLICATION NUMBER: US/09/740,332
; CURRENT FILING DATE: 2001-03-26
; NUMBER OF SEQ ID NOS: 9704
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 917
; LENGTH: 17
; TYPE: RNA
; ORGANISM: artificial sequence
; FEATURE:
; NAME/KEY: misc\_feature
; LOCATION:
; OTHER INFORMATION: oligonucleotide substrate
US-09-740-332-917

Query Match
Best Local Similarity 3.0%; Score 13.4; DB 1; Length 17;
Matches 12; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Qy 210 ACCTGCGCGGGTCTG 224
Db 2 ACCUGCGCGGCGUCG 16

RESULT 275
US-09-740-332-3638/c
; Sequence 3638, Application US/09740332
; Publication No. US20030125270A1
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals Inc.
; TITLE OF INVENTION: Enzymatic Nucleic Acid Treatment of Diseases or Conditions Related to Hepatitis C Virus Infection
; FILE REFERENCE: RPI 400/003
; CURRENT APPLICATION NUMBER: US/09/740,332
; CURRENT FILING DATE: 2001-03-26
; NUMBER OF SEQ ID NOS: 9704
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 3638
; LENGTH: 17
; TYPE: RNA
; ORGANISM: artificial sequence
; FEATURE:
; NAME/KEY: misc\_feature
; LOCATION:
; OTHER INFORMATION: oligonucleotide substrate
US-09-740-332-3638

Query Match
Best Local Similarity 3.0%; Score 13.4; DB 1; Length 17;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 210 ACCTGCGCGGGTCTG 224
Db 17 ACCTGCGCGGCGCTCG 3

RESULT 276
US-09-792-818-429/c
; Sequence 429, Application US/09792818
; Publication No. US20030134806A1
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals, Inc.
; APPLICANT: Jarvis, Thale
; APPLICANT: Von Carlowitz, Ira
; APPLICANT: McSwiggen, Jim
; APPLICANT: Hamblin, Paul
; APPLICANT: Ellis, Jonathan
; TITLE OF INVENTION: Method and Reagent for the Inhibition of Grb-2-related with Insertion of Grb-2-related with Insertion
; FILE REFERENCE: (GRID) Gene
; FILE REFERENCE: MRHB00-901-A (400/013)
; CURRENT APPLICATION NUMBER: US/09/792,818
; CURRENT FILING DATE: 2001-02-23
; NUMBER OF SEQ ID NOS: 2304
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 429
; LENGTH: 17
; TYPE: RNA
; ORGANISM: Homo sapiens
; OTHER INFORMATION: oligonucleotide substrate
US-09-792-818-429

Query Match
Best Local Similarity 3.0%; Score 13.4; DB 1; Length 17;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 132 CTCGGCCTGCCGCCT 146
Db 16 CTCGCCCTGCCGCCT 2

```
RESULT 277
US-09-792-818-857/c
; Sequence 857, Application US/09792818
; Publication No. US20030134806A1
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals, Inc.
; APPLICANT: Jarvis, Thale
; APPLICANT: Von Carlowitz, Ira
; APPLICANT: McSwiggen, Jim
; APPLICANT: Hamblin, Paul
; APPLICANT: Ellis, Jonathan
; TITLE OF INVENTION: Method and Reagent for the Inhibition of Grb-2-related with Inse
; TITLE OF INVENTION: (GRID) Gene
; FILE REFERENCE: MBH00-901-A (400/013)
; CURRENT APPLICATION NUMBER: US/09/792,818
; CURRENT FILING DATE: 2001-02-23
; NUMBER OF SEQ ID NOS: 2304
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 857
; LENGTH: 17
; TYPE: RNA
; ORGANISM: Homo sapiens
US-09-792-818-857

Query Match          3.0%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 2.4e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 132 CTCGGCCTGCCGCT 146
Db 15 CTCGGCCTGCCGCT 1

RESULT 278
US-09-817-879-917
; Sequence 917, Application US/09817879
; Publication No. US2003017131A1
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals Inc.
; TITLE OF INVENTION: Enzymatic Nucleic Acid Treatment of Diseases or Conditions Relate
; FILE REFERENCE: MBH00-801-F
; CURRENT APPLICATION NUMBER: US/09/817,879
; CURRENT FILING DATE: 2001-03-26
; NUMBER OF SEQ ID NOS: 9703
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 917
; LENGTH: 17
; TYPE: RNA
; ORGANISM: artificial sequence
; NAME/KEY: misc_feature
; LOCATION:
; OTHER INFORMATION: oligonucleotide substrate
US-09-817-879-917

Query Match          3.0%; Score 13.4; DB 1; Length 17;
Best Local Similarity 80.0%; Pred. No. 2.4e+02;
Matches 12; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 210 ACCTCGCGCGGTGTCG 224
Db 2 ACCUGCGCGCGGCGUCG 16

RESULT 279
US-09-817-879-3638/c
; Sequence 3638, Application US/09817879
; Publication No. US2003017131A1
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals Inc.
; TITLE OF INVENTION: Enzymatic Nucleic Acid Treatment of Diseases or Conditions Relate
```

```
; TITLE OF INVENTION: Hepatitis C Virus Infection
; FILE REFERENCE: MBH00-801-F
; CURRENT APPLICATION NUMBER: US/09/817,879
; CURRENT FILING DATE: 2001-03-26
; NUMBER OF SEQ ID NOS: 9703
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 3638
; LENGTH: 17
; TYPE: RNA
; ORGANISM: artificial sequence
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION:
; OTHER INFORMATION: oligonucleotide substrate
US-09-817-879-3638

Query Match          3.0%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 2.4e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 210 ACCTGCGCGGTGTCG 224
Db 17 ACCTGCGCGGTGTCG 3

RESULT 280
US-10-232-634-11
; Sequence 11, Application US/10232634
; Publication No. US20030105314A1
; GENERAL INFORMATION:
; APPLICANT: Guida, Marco
; APPLICANT: Hall, Jeff
; TITLE OF INVENTION: GENETIC TYPING OF THE HUMAN CYTOCHROME P450 2A6 GENE
; FILE REFERENCE: 4389-20
; CURRENT APPLICATION NUMBER: US/10/232,634
; CURRENT FILING DATE: 2002-08-30
; PRIOR APPLICATION NUMBER: US/09/586,376
; PRIOR FILING DATE: 2000-06-02
; NUMBER OF SEQ ID NOS: 29
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 11
; LENGTH: 17
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-232-634-11

Query Match          3.0%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 2.4e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 41 TTTGTCTAACCCCTAA 55
Db 3 TTTGTCTTACCCTAA 17

RESULT 281
US-10-232-634-12
; Sequence 12, Application US/10232634
; Publication No. US20030105314A1
; GENERAL INFORMATION:
; APPLICANT: Guida, Marco
; APPLICANT: Hall, Jeff
; TITLE OF INVENTION: GENETIC TYPING OF THE HUMAN CYTOCHROME P450 2A6 GENE
; FILE REFERENCE: 4389-20
; CURRENT APPLICATION NUMBER: US/10/232,634
; CURRENT FILING DATE: 2002-08-30
; PRIOR APPLICATION NUMBER: US/09/586,376
; PRIOR FILING DATE: 2000-06-02
; NUMBER OF SEQ ID NOS: 29
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 12
```

```
; LENGTH: 17
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-232-634-12

Query Match          3.0%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 2.4e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 41 TTTGCTCAACCTAA 55
      ||||| |||||
Db 3 TTTGCTCACCTAA 17

RESULT 282
US-10-157-580A-27
; Sequence 27, Application US/10157580A
; Publication No. US20030124513A1
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals, Inc.
; APPLICANT: McSwiggen, Jim
; TITLE OF INVENTION: Enzymatic Nucleic Acid Treatment of Diseases or Conditions Related to Levels of HIV
; FILE REFERENCE: MBH01-665-A (400/051)
; CURRENT APPLICATION NUMBER: US/10/157,580A
; CURRENT FILING DATE: 2002-08-30
; NUMBER OF SEQ ID NOS: 170
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 27
; LENGTH: 17
; TYPE: RNA
; ORGANISM: Human immunodeficiency virus
US-10-157-580A-27

Query Match          3.0%; Score 13.4; DB 1; Length 17;
Best Local Similarity 80.0%; Pred. No. 2.4e+02;
Matches 12; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 428 ACCGAGGACTCGGCT 442
      || ||||| |||||
Db 2 ACCGAGGACUCGGCU 16

RESULT 283
US-10-157-580A-38
; Sequence 38, Application US/10157580A
; Publication No. US20030124513A1
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals, Inc.
; APPLICANT: McSwiggen, Jim
; TITLE OF INVENTION: Enzymatic Nucleic Acid Treatment of Diseases or Conditions Related to Levels of HIV
; FILE REFERENCE: MBH01-665-A (400/051)
; CURRENT APPLICATION NUMBER: US/10/157,580A
; CURRENT FILING DATE: 2002-08-30
; NUMBER OF SEQ ID NOS: 170
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 38
; LENGTH: 17
; TYPE: RNA
; ORGANISM: Human immunodeficiency virus
US-10-157-580A-38

Query Match          3.0%; Score 13.4; DB 1; Length 17;
Best Local Similarity 80.0%; Pred. No. 2.4e+02;
Matches 12; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 428 ACCGAGGACTCGGCT 442
      || ||||| |||||
Db 3 ACCGAGGACUCGGCU 17

RESULT 284
```

```
US-10-157-580A-68
; Sequence 68, Application US/10157580A
; Publication No. US20030124513A1
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals, Inc.
; APPLICANT: McSwiggen, Jim
; TITLE OF INVENTION: Enzymatic Nucleic Acid Treatment of Diseases or Conditions Related to Levels of HIV
; FILE REFERENCE: MBH01-665-A (400/051)
; CURRENT APPLICATION NUMBER: US/10/157,580A
; CURRENT FILING DATE: 2002-08-30
; NUMBER OF SEQ ID NOS: 170
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 68
; LENGTH: 17
; TYPE: RNA
; ORGANISM: Human immunodeficiency virus
US-10-157-580A-68

Query Match          3.0%; Score 13.4; DB 1; Length 17;
Best Local Similarity 80.0%; Pred. No. 2.4e+02;
Matches 12; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 428 ACCGAGGACTCGGCT 442
      || ||||| |||||
Db 1 ACCGAGGACUCGGCU 15

RESULT 285
US-10-138-674-4559
; Sequence 4559, Application US/10138674
; Publication No. US20040077565A1
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals, Inc.
; APPLICANT: Pavco, Pam
; APPLICANT: McSwiggen, Jim
; APPLICANT: Stinchcomb, Dan
; APPLICANT: Escobedo, Jaime
; TITLE OF INVENTION: Method and Reagent for the Treatment of Diseases or Conditions Related to Levels of Vascular Endothelial Growth Factor Receptor
; FILE REFERENCE: MBH00-876-N (400/049)
; CURRENT APPLICATION NUMBER: US/10/138,674
; CURRENT FILING DATE: 2002-05-03
; NUMBER OF SEQ ID NOS: 20822
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 4559
; LENGTH: 17
; TYPE: RNA
; ORGANISM: Homo sapiens
US-10-138-674-4559

Query Match          3.0%; Score 13.4; DB 1; Length 17;
Best Local Similarity 86.7%; Pred. No. 2.4e+02;
Matches 13; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 164 AGCAACCAAAAAATG 178
      ||||| |||||
Db 2 AGCAAGCAAAAAAUG 16

RESULT 286
US-10-138-674-7501/c
; Sequence 7501, Application US/10138674
; Publication No. US20040077565A1
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals, Inc.
; APPLICANT: Pavco, Pam
; APPLICANT: McSwiggen, Jim
; APPLICANT: Stinchcomb, Dan
; APPLICANT: Escobedo, Jaime
; TITLE OF INVENTION: Method and Reagent for the Treatment of Diseases or Conditions Related to Levels of Vascular Endothelial Growth Factor Receptor
; FILE REFERENCE: MBH00-876-N (400/049)
```









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; PRIOR APPLICATION NUMBER: US 60/296,249
; PRIOR FILING DATE: 2001-06-06
; PRIOR APPLICATION NUMBER: US 60/294,140
; PRIOR FILING DATE: 2001-05-29
; PRIOR APPLICATION NUMBER: US 10/238,700
; PRIOR FILING DATE: 2002-09-10
; PRIOR APPLICATION NUMBER: US 10/163,552
; PRIOR FILING DATE: 2002-06-06
; PRIOR APPLICATION NUMBER: US 10/157,580
; PRIOR FILING DATE: 2002-05-29
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2002-10-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: US 10/417,012
; PRIOR FILING DATE: 2003-04-16
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 6810
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 6709
; LENGTH: 17
; TYPE: RNA
; ORGANISM: Homo sapiens
US-10-724-270-6709

Query Match      3.0%; Score 13.4; DB 1; Length 17;
Best Local Similarity 80.0%; Pred. No. 2.4e+02;
Matches 12; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Qy 428 ACCGAGACTCGGCT 442
Db 1 ACGCAGGACUGGCU 15

RESULT 297
US-911-318-41
; Sequence 41, Application US/10911318
; Publication No. US20050130186A1
; GENERAL INFORMATION:
; APPLICANT: We Gene Technologies, Inc.
; TITLE OF INVENTION: MENINGITIS DETECTION CHIP AND FABRICATION METHOD THEREOF AND
; TITLE OF INVENTION: METHOD OF DETECTING MENINGITIS AND PRIMER SET FOR MENINGITIS
; TITLE OF INVENTION: DETECTION
; FILE REFERENCE: 123333-US-PA
; CURRENT APPLICATION NUMBER: US/10/911,318
; PRIOR FILING DATE: 2004-08-03
; PRIOR APPLICATION NUMBER: TW 92135134
; PRIOR FILING DATE: 2003-12-12
; NUMBER OF SEQ ID NOS: 134
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 41
; LENGTH: 17
; TYPE: DNA
; ORGANISM: artificial sequence
; FEATURE:
; OTHER INFORMATION: Probe
US-10-911-318-41

Query Match      3.0%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 2.4e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 208 GGACCTGCGCGGGT 222
Db 2 GGACCTGCGGGT 16

RESULT 298
US-09-893-252-4/c
; Sequence 4, Application US/09893252
; Publication No. US20030012755A1
; GENERAL INFORMATION:
; APPLICANT: Styczynski, Peter
```

```
; APPLICANT: Ahluwalia, Gurpreet S.
; TITLE OF INVENTION: REDUCTION OF HAIR GROWTH
; FILE REFERENCE: 00216-552001
; CURRENT APPLICATION NUMBER: US/09/893,252
; CURRENT FILING DATE: 2001-10-12
; NUMBER OF SEQ ID NOS: 4
; SOFTWARE: FastSeq For Windows Version 4.0
; SEQ ID NO 4
; LENGTH: 13
; TYPE: RNA
; ORGANISM: Homo sapiens
US-09-893-252-4
```

```
Query Match      2.9%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.5e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
Qy 46 CTAACCCCTAACTG 58
Db 13 CTAACCCCTAACTG 1
```

```
RESULT 299
US-10-038-335-1/c
; Sequence 1, Application US/10038335
; Publication No. US20030096776A1
; GENERAL INFORMATION:
; APPLICANT: Ecker, David J.
; APPLICANT: Wyatt, Jacqueline
; APPLICANT: Bennett, C. Frank
; APPLICANT: Hanecak, Ronnie
; APPLICANT: Brown-Driver, Vickie
; APPLICANT: Vickers, Timothy
; APPLICANT: Chiang, Ming-Yi
; APPLICANT: Anderson, Kevin
; TITLE OF INVENTION: Modulation Of Telomere Length By Oligonucleotides Having A G-Core
; FILE REFERENCE: ISIS-4976
; CURRENT APPLICATION NUMBER: US/10/038,335
; CURRENT FILING DATE: 2001-01-02
; PRIOR APPLICATION NUMBER: 09/299,058
; PRIOR FILING DATE: 1999-04-23
; PRIOR APPLICATION NUMBER: 08/403,888
; PRIOR FILING DATE: 1995-06-12
; PRIOR APPLICATION NUMBER: PCT/US93/09297
; PRIOR FILING DATE: 1993-09-29
; PRIOR APPLICATION NUMBER: 07/954,185
; PRIOR FILING DATE: 1992-09-29
; NUMBER OF SEQ ID NOS: 10
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 1
; LENGTH: 13
; TYPE: DNA
; ORGANISM: No. US20030096776A1el sequence
; FEATURE:
; OTHER INFORMATION: Antisense sequence
US-10-038-335-1
```

```
Query Match      2.9%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.5e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
Qy 46 CTAACCCCTAACTG 58
Db 13 CTAACCCCTAACTG 1
```

```
RESULT 300
US-10-038-335-2/c
; Sequence 2, Application US/10038335
; Publication No. US20030096776A1
; GENERAL INFORMATION:
; APPLICANT: Ecker, David J.
```

APPLICANT: Wyatt, Jacqueline  
APPLICANT: Bennett, C. Frank  
APPLICANT: Hanecak, Ronnie  
APPLICANT: Brown-Driver, Vickie  
APPLICANT: Vickers, Timothy  
APPLICANT: Chiang, Ming-yi  
APPLICANT: Anderson, Kevin  
TITLE OF INVENTION: Modulation of Telomere Length By Oligonucleotides Having A G-Core  
FILE REFERENCE: ISIS-4976  
CURRENT APPLICATION NUMBER: US/10/038,335  
PRIOR FILING DATE: 2001-01-02  
PRIOR APPLICATION NUMBER: 09/299,058  
PRIOR FILING DATE: 1999-04-23  
PRIOR APPLICATION NUMBER: 08/403,888  
PRIOR FILING DATE: 1995-06-12  
PRIOR APPLICATION NUMBER: PCT/US93/09297  
PRIOR FILING DATE: 1993-09-29  
PRIOR APPLICATION NUMBER: 07/954,185  
PRIOR FILING DATE: 1992-09-29  
NUMBER OF SEQ ID NOS: 10  
SOFTWARE: PatentIn version 3.1  
SEQ ID NO 2  
LENGTH: 13  
TYPE: DNA  
ORGANISM: No. US20030096776A1el sequence  
FEATURE:  
OTHER INFORMATION: Antisense sequence  
US-10-038-335-2

Query Match 2.9%; Score 13; DB 1; Length 13;  
Best Local Similarity 100.0%; Pred. No. 1.5e+02;  
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 46 CTAACCCCTAACTG 58  
Db 13 CTAACCCCTAACTG 1

RESULT 301  
US-10-255-535-3/c  
Sequence 3, Application US/10255535  
Publication No. US20030138814A1  
GENERAL INFORMATION:  
APPLICANT: Geron Corporation  
APPLICANT: Gryaznov, Sergei  
APPLICANT: Pongracz, Kristina  
APPLICANT: Tolman, Richard L.  
APPLICANT: Morin, Gregg B.  
TITLE OF INVENTION: Oligonucleotide Conjugates  
FILE REFERENCE: 072/002P  
CURRENT APPLICATION NUMBER: US/10/255,535  
CURRENT FILING DATE: 2002-09-25  
PRIOR APPLICATION NUMBER: PCT/US02/09138  
PRIOR FILING DATE: 2002-03-21  
PRIOR APPLICATION NUMBER: US 60/278,322  
PRIOR FILING DATE: 2001-03-23  
NUMBER OF SEQ ID NOS: 19  
SOFTWARE: PatentIn version 3.1  
SEQ ID NO 3  
LENGTH: 13  
TYPE: DNA  
ORGANISM: Artificial Sequence  
FEATURE:  
OTHER INFORMATION: oligonucleotide  
US-10-255-535-3

Query Match 2.9%; Score 13; DB 1; Length 13;  
Best Local Similarity 100.0%; Pred. No. 1.5e+02;  
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 42 TTGCTTAACCCCTA 54  
Db 13 TTGCTTAACCCCTA 1

Db 13 TTGCTTAACCCCTA 1  
RESULT 302  
US-10-463-076-2/c  
Sequence 2, Application US/10463076  
Publication No. US20030212032A1  
GENERAL INFORMATION:  
APPLICANT: Geron Corporation  
APPLICANT: Gryaznov, Sergei  
APPLICANT: Pongracz, Kristina  
APPLICANT: Matray, Tracey  
TITLE OF INVENTION: Oligonucleotide N3'-->P5' Thiophosphoramidates: Their Synthesis  
FILE REFERENCE: 039/004C  
CURRENT APPLICATION NUMBER: US/10/463,076  
CURRENT FILING DATE: 2003-06-17  
PRIOR APPLICATION NUMBER: US 09/657,445  
PRIOR FILING DATE: 2000-09-08  
PRIOR APPLICATION NUMBER: US 60/153,201  
PRIOR FILING DATE: 1999-09-10  
PRIOR APPLICATION NUMBER: US 60/160,444  
PRIOR FILING DATE: 1999-10-19  
NUMBER OF SEQ ID NOS: 9  
SOFTWARE: PatentIn version 3.1  
SEQ ID NO 2  
LENGTH: 13  
TYPE: DNA  
ORGANISM: Artificial Sequence  
FEATURE:  
OTHER INFORMATION: Synthetic oligonucleotide with potential inhibition activity  
US-10-463-076-2

Query Match 2.9%; Score 13; DB 1; Length 13;  
Best Local Similarity 100.0%; Pred. No. 1.5e+02;  
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 42 TTGCTTAACCCCTA 54  
Db 13 TTGCTTAACCCCTA 1

RESULT 303  
US-10-463-076-8/c  
Sequence 8, Application US/10463076  
Publication No. US20030212032A1  
GENERAL INFORMATION:  
APPLICANT: Geron Corporation  
APPLICANT: Gryaznov, Sergei  
APPLICANT: Pongracz, Kristina  
APPLICANT: Matray, Tracey  
TITLE OF INVENTION: Oligonucleotide N3'-->P5' Thiophosphoramidates: Their Synthesis  
FILE REFERENCE: 039/004C  
CURRENT APPLICATION NUMBER: US/10/463,076  
CURRENT FILING DATE: 2003-06-17  
PRIOR APPLICATION NUMBER: US 09/657,445  
PRIOR FILING DATE: 2000-09-08  
PRIOR APPLICATION NUMBER: US 60/153,201  
PRIOR FILING DATE: 1999-09-10  
PRIOR APPLICATION NUMBER: US 60/160,444  
PRIOR FILING DATE: 1999-10-19  
NUMBER OF SEQ ID NOS: 9  
SOFTWARE: PatentIn version 3.1  
SEQ ID NO 8  
LENGTH: 13  
TYPE: DNA  
ORGANISM: Artificial Sequence  
FEATURE:  
OTHER INFORMATION: Synthetic oligonucleotide with potential inhibition activity  
US-10-463-076-8

Query Match 2.9%; Score 13; DB 1; Length 13;  
Best Local Similarity 100.0%; Pred. No. 1.5e+02;  
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 46 CTAACCCCTAACTG 58  
Db 13 CTAACCCCTAACTG 1

## RESULT 304

US-10-181-823-18/c  
; Sequence 18, Application US/10181823  
; Publication No. US20040126752A1  
; GENERAL INFORMATION:  
; APPLICANT: Geron Corporation  
; APPLICANT: Gryaznov, Sergei  
; APPLICANT: Schultz, Ronald G  
; TITLE OF INVENTION: 2'-Arabino-Fluoroligonucleotide N3'-->P5' Phosphoramidates: Their Synthesis and Use  
; FILE REFERENCE: 049/002  
; CURRENT APPLICATION NUMBER: US/10/181,823  
; CURRENT FILING DATE: 2003-12-29  
; PRIOR APPLICATION NUMBER: PCT/US01/01918  
; PRIOR FILING DATE: 2001-01-19  
; NUMBER OF SEQ ID NOS: 23  
; SOFTWARE: PatentIn version 3.1  
; SEQ ID NO 18  
; LENGTH: 13  
; TYPE: DNA  
; ORGANISM: Homo sapiens  
US-10-181-823-18

Query Match 2.9%; Score 13; DB 1; Length 13;  
Best Local Similarity 100.0%; Pred. No. 1.5e+02;  
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 42 TTGCTTAACCCCTA 54  
Db 13 TTGCTTAACCCCTA 1

## RESULT 305

US-10-181-823-22/c  
; Sequence 22, Application US/10181823  
; Publication No. US20040126752A1  
; GENERAL INFORMATION:  
; APPLICANT: Geron Corporation  
; APPLICANT: Gryaznov, Sergei  
; APPLICANT: Schultz, Ronald G  
; TITLE OF INVENTION: 2'-Arabino-Fluoroligonucleotide N3'-->P5' Phosphoramidates: Their Synthesis and Use  
; FILE REFERENCE: 049/002  
; CURRENT APPLICATION NUMBER: US/10/181,823  
; CURRENT FILING DATE: 2003-12-29  
; PRIOR APPLICATION NUMBER: PCT/US01/01918  
; PRIOR FILING DATE: 2001-01-19  
; NUMBER OF SEQ ID NOS: 23  
; SOFTWARE: PatentIn version 3.1  
; SEQ ID NO 22  
; LENGTH: 13  
; TYPE: DNA  
; ORGANISM: Homo sapiens  
US-10-181-823-22

Query Match 2.9%; Score 13; DB 1; Length 13;  
Best Local Similarity 100.0%; Pred. No. 1.5e+02;  
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 42 TTGCTTAACCCCTA 54  
Db 13 TTGCTTAACCCCTA 1

## RESULT 306

US-10-967-755-2/c  
; Sequence 2, Application US/10967755

; Publication No. US20050049408A1  
; GENERAL INFORMATION:  
; APPLICANT: Geron Corporation  
; APPLICANT: Gryaznov, Sergei  
; APPLICANT: Pongracz, Krisztina  
; APPLICANT: Matray, Tracey  
; TITLE OF INVENTION: Oligonucleotide N3'-->P5' Thiophosphoramidates: Their Synthesis and Use  
; FILE REFERENCE: 039/005C  
; CURRENT APPLICATION NUMBER: US/10/967,755  
; CURRENT FILING DATE: 2004-10-18  
; PRIOR APPLICATION NUMBER: US 10/463,076  
; PRIOR FILING DATE: 2003-06-17  
; PRIOR APPLICATION NUMBER: US 09/657,445  
; PRIOR FILING DATE: 2000-09-08  
; PRIOR APPLICATION NUMBER: US 60/153,201  
; PRIOR FILING DATE: 1999-09-10  
; PRIOR APPLICATION NUMBER: US 60/160,444  
; PRIOR FILING DATE: 1999-10-19  
; NUMBER OF SEQ ID NOS: 9  
; SOFTWARE: PatentIn version 3.1  
; SEQ ID NO 2  
; LENGTH: 13  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Synthetic oligonucleotide with potential inhibition activity  
US-10-967-755-2

Query Match 2.9%; Score 13; DB 1; Length 13;  
Best Local Similarity 100.0%; Pred. No. 1.5e+02;  
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 42 TTGCTTAACCCCTA 54  
Db 13 TTGCTTAACCCCTA 1

## RESULT 307

US-10-967-755-8/c  
; Sequence 8, Application US/10967755  
; Publication No. US20050049408A1  
; GENERAL INFORMATION:  
; APPLICANT: Geron Corporation  
; APPLICANT: Gryaznov, Sergei  
; APPLICANT: Pongracz, Krisztina  
; APPLICANT: Matray, Tracey  
; TITLE OF INVENTION: Oligonucleotide N3'-->P5' Thiophosphoramidates: Their Synthesis and Use  
; FILE REFERENCE: 039/005C  
; CURRENT APPLICATION NUMBER: US/10/967,755  
; CURRENT FILING DATE: 2004-10-18  
; PRIOR APPLICATION NUMBER: US 10/463,076  
; PRIOR FILING DATE: 2003-06-17  
; PRIOR APPLICATION NUMBER: US 09/657,445  
; PRIOR FILING DATE: 2000-09-08  
; PRIOR APPLICATION NUMBER: US 60/153,201  
; PRIOR FILING DATE: 1999-09-10  
; PRIOR APPLICATION NUMBER: US 60/160,444  
; PRIOR FILING DATE: 1999-10-19  
; NUMBER OF SEQ ID NOS: 9  
; SOFTWARE: PatentIn version 3.1  
; SEQ ID NO 8  
; LENGTH: 13  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Synthetic oligonucleotide with potential inhibition activity  
US-10-967-755-8

Query Match 2.9%; Score 13; DB 1; Length 13;  
Best Local Similarity 100.0%; Pred. No. 1.5e+02;  
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 46 CTAACCCCTAACTG 58

Db 13 CTAACCCCTAAGTG 1

RESULT 308  
US-10-618-779-34  
; Sequence 34, Application US/10618779  
; Publication No. US20050175633A1  
; GENERAL INFORMATION:  
; APPLICANT: PAUL, PREM S.  
; MENG, XIANG-JIN  
; HALBUR, PATRICK G.  
; MOROZOV, IGOR  
; LUM, MELISSA A.  
; TITLE OF INVENTION: A POLYNUCLEIC ACID ISOLATED FROM A  
; PORCINE REPRODUCTIVE AND RESPIRATORY SYNDROME VIRUS (PRRSV)  
; A PROTEIN ENCODED BY THE POLYNUCLEIC ACID, A VACCINE  
; PREPARED FROM OR CONTAINING THE POLYNUCLEIC ACID OR  
; NUMBER OF SEQUENCES: 77  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT,  
; P.C.  
; STREET: 1755 S. Jefferson Davis Highway, Suite 400  
; CITY: Arlington  
; STATE: Virginia  
; COUNTRY: U.S.A.  
; ZIP: 22202  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.25  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/10/618,779  
; FILING DATE: 15-Jul-2003  
; CLASSIFICATION: <Unknown>  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US/08/301,435  
; FILING DATE: 01-SEP-1994  
; APPLICATION NUMBER: US 08/131,625  
; FILING DATE: 05-OCT-1993  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Lavalleye, Jean-Paul M.P.  
; REGISTRATION NUMBER: 31,451  
; REFERENCE/DOCKET NUMBER: 4625-021-55X CIP  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (703) 413-3000  
; TELEFAX: (703) 413-2220  
; TELEX: 248855 OPAT UR  
; INFORMATION FOR SEQ ID NO: 34:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 16 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: unknown  
; TOPOLOGY: linear  
; MOLECULE TYPE: DNA (genomic)  
; SEQUENCE DESCRIPTION: SEQ ID NO: 34:  
US-10-618-779-34

Query Match 2.9%; Score 13; DB 1; Length 16;  
Best Local Similarity 100.0%; Pred. No. 2.3e+02;  
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 268 GGGGCTTCTCCGG 280  
Db 4 GGGGCTTCTCCGG 16

RESULT 309  
US-10-238-700-3509/c  
; Sequence 3509, Application US/10238700  
; Publication No. US20030153521A1  
; GENERAL INFORMATION:  
; APPLICANT: Ribozyme Pharmaceuticals, Inc.  
; APPLICANT: McSwiggen, James  
; TITLE OF INVENTION: Nucleic Acid Treatment of Diseases or Conditions Related to Level  
; FILE REFERENCE: 400/057 (MBHB01-1158-A)  
; CURRENT APPLICATION NUMBER: US/10/238,700  
; CURRENT FILING DATE: 2002-09-18  
; PRIOR APPLICATION NUMBER: PCT/US 02/16840  
; PRIOR FILING DATE: 2002-05-29  
; PRIOR APPLICATION NUMBER: US 60/318,471  
; PRIOR FILING DATE: 2001-09-10  
; NUMBER OF SEQ ID NOS: 4666  
; SOFTWARE: PatentIn version 3.0  
; SEQ ID NO 3509  
; LENGTH: 17  
; TYPE: RNA  
; ORGANISM: Homo sapiens  
US-10-238-700-3509

Query Match 2.9%; Score 13; DB 1; Length 17;  
Best Local Similarity 100.0%; Pred. No. 2.6e+02;  
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 225 CCTGCCCCAGCCCC 237  
Db 13 CCTGCCCCAGCCCC 1

RESULT 310  
US-10-724-270-2188/c  
; Sequence 2188, Application US/10724270  
; Publication No. US20050080031A1  
; GENERAL INFORMATION:  
; APPLICANT: McSwiggen, James  
; TITLE OF INVENTION: Nucleic Acid Treatment of Diseases or Conditions Related to Level  
; FILE REFERENCE: 400/046-US (MBHB02-326-A)  
; CURRENT APPLICATION NUMBER: US/10/724,270  
; CURRENT FILING DATE: 2003-11-26  
; PRIOR APPLICATION NUMBER: PCT/US02/16840  
; PRIOR FILING DATE: 2002-05-29  
; PRIOR APPLICATION NUMBER: US 60/318,471  
; PRIOR FILING DATE: 2001-09-10  
; PRIOR APPLICATION NUMBER: US 60/296,249  
; PRIOR FILING DATE: 2001-06-06  
; PRIOR APPLICATION NUMBER: US 60/294,140  
; PRIOR FILING DATE: 2001-05-29  
; PRIOR APPLICATION NUMBER: US 10/238,700  
; PRIOR FILING DATE: 2002-09-10  
; PRIOR APPLICATION NUMBER: US 10/163,552  
; PRIOR FILING DATE: 2002-06-06  
; PRIOR APPLICATION NUMBER: US 10/157,580  
; PRIOR FILING DATE: 2002-05-29  
; PRIOR APPLICATION NUMBER: US 10/693,059  
; PRIOR FILING DATE: 2002-10-23  
; PRIOR APPLICATION NUMBER: US 10/444,853  
; PRIOR FILING DATE: 2003-05-23  
; PRIOR APPLICATION NUMBER: US 10/417,012  
; PRIOR FILING DATE: 2003-04-16  
; Remaining Prior Application data removed - See File Wrapper or PALM.  
; NUMBER OF SEQ ID NOS: 6810  
; SOFTWARE: PatentIn version 3.0  
; SEQ ID NO 2188  
; LENGTH: 17  
; TYPE: RNA  
; ORGANISM: Homo sapiens  
US-10-724-270-2188

Query Match 2.9%; Score 13; DB 1; Length 17;  
Best Local Similarity 100.0%; Pred. No. 2.6e+02;  
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 225 CCTGCCCCAGCCCC 237

```
Db      13  CCTGCCAGCCCC 1
|||||
RESULT 311
US-08-887-505-159
; Sequence 159, Application US/08887505
; Publication No. US20020081577A1
; GENERAL INFORMATION:
; APPLICANT: Kilkuskie, Robert E.
; APPLICANT: Frank, Bruce L.
; APPLICANT: Goodchild, John
; APPLICANT: Wolfe, Jia L.
; APPLICANT: Roberts, Peter C.
; APPLICANT: Hamlin, Jr., Henry A.
; APPLICANT: Walther, Debra M.
; TITLE OF INVENTION: OLIGONUCLEOTIDES SPECIFIC FOR
; TITLE OF INVENTION: HEPATITIS C VIRUS
; NUMBER OF SEQUENCES: 172
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Hale and Dorr LLP
; STREET: 60 State Street
; CITY: Boston
; STATE: MA
; COUNTRY: USA
; ZIP: 02109
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/887,505
; FILING DATE:
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/471,968
; FILING DATE: 08-JUN-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Kerner, Ann-Louise
; REGISTRATION NUMBER: 33,523
; REFERENCE/DOCKET NUMBER: HY2-040CIP
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (617) 526-6000
; TELEFAX: (617) 526-5000
; INFORMATION FOR SEQ ID NO: 159:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 16 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA/RNA
; HYPOTHETICAL: NO
; ANTI-SENSE: YES
US-08-887-505-159

Query Match      2.8%; Score 12.8; DB 1; Length 16;
Best Local Similarity 81.2%; Pred. No. 2.4e+02;
Matches 13; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY      199  CCTCTCCCGGGGACCTG 214
|||||
Db      1  CCCUCCGGGGTCTCTG 16

RESULT 312
US-10-712-672-1787
; Sequence 1787, Application US/10712672
; Publication No. US20040102413A1
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals, Inc.
; APPLICANT: Chowrira, Bharat
```

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; APPLICANT: McSwiggen, Jim
; APPLICANT: Stinchcomb, Dan
; TITLE OF INVENTION: Method and Reagent for the Inhibition of Telomerase Enzyme
; FILE REFERENCE: MBH00-882-C (400/019)
; CURRENT APPLICATION NUMBER: US/10/712,672
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US/09/653,225
; PRIOR FILING DATE: 2000-08-31
; PRIOR APPLICATION NUMBER: 60/197,769
; PRIOR FILING DATE: 2000-04-14
; PRIOR APPLICATION NUMBER: 60/150,713
; PRIOR FILING DATE: 1999-08-31
; NUMBER OF SEQ ID NOS: 5586
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 1787
; LENGTH: 16
; TYPE: RNA
; ORGANISM: Homo sapiens
US-10-712-672-1787

Query Match      2.8%; Score 12.8; DB 1; Length 16;
Best Local Similarity 81.2%; Pred. No. 2.4e+02;
Matches 13; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY      247  CCTGGAGCGCGGTC 262
|||||
Db      1  CCUGAGCGCCGAGCC 16

RESULT 313
US-10-483-958-61/c
; Sequence 61, Application US/10483958
; Publication No. US20040254363A1
; GENERAL INFORMATION:
; APPLICANT: PRICE FOUNDATION LIMITED
; APPLICANT: YEAGER, Meredith
; TITLE OF INVENTION: GENES AND SNPs ASSOCIATED WITH EATING DISORDERS
; FILE REFERENCE: 53061-5005-US
; CURRENT APPLICATION NUMBER: US/10/483,958
; CURRENT FILING DATE: 2004-01-16
; PRIOR APPLICATION NUMBER: PCT/US02/22555
; PRIOR FILING DATE: 2002-07-16
; PRIOR APPLICATION NUMBER: US 60/305,153
; PRIOR FILING DATE: 2001-07-16
; PRIOR APPLICATION NUMBER: US 60/306,440
; PRIOR FILING DATE: 2001-07-20
; PRIOR APPLICATION NUMBER: US 60/331,285
; PRIOR FILING DATE: 2001-11-13
; PRIOR APPLICATION NUMBER: US 60/340,843
; PRIOR FILING DATE: 2001-12-19
; PRIOR APPLICATION NUMBER: US 60/340,844
; NUMBER OF SEQ ID NOS: 98
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 61
; LENGTH: 16
; TYPE: DNA
; ORGANISM: Artificial sequence
; FEATURE:
; OTHER INFORMATION: HTR1d probe: FAM and MGB tagged
US-10-483-958-61

Query Match      2.8%; Score 12.8; DB 1; Length 16;
Best Local Similarity 87.5%; Pred. No. 2.4e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY      2  GCTTCCGCGAGGTGGG 17
|||||
Db      16  GCTTCCGCGGTGGTGGG 1

RESULT 314
```



US-10-730-771-444  
; Sequence 444, Application US/10730771  
; Publication No. US20050074787A1  
; GENERAL INFORMATION:  
; APPLICANT: Fan, Jian-Bing  
; APPLICANT: Hirschhorn, Joel N.  
; APPLICANT: Huang, Xiaohua  
; APPLICANT: Kaplan, Paul  
; APPLICANT: Lander, Eric S.  
; APPLICANT: Lockhart, David J.  
; APPLICANT: Ryder, Thomas  
; APPLICANT: Sklar, Pamela  
; TITLE OF INVENTION: UNIVERSAL ARRAYS  
; FILE REFERENCE: 2825.1016-007  
; CURRENT APPLICATION NUMBER: US/10730,771  
; CURRENT FILING DATE: 2003-12-08  
; PRIOR APPLICATION NUMBER: US 60/126,473  
; PRIOR FILING DATE: 1999-03-26  
; PRIOR APPLICATION NUMBER: US 60/140,359  
; PRIOR FILING DATE: 1999-06-23  
; PRIOR APPLICATION NUMBER: US 09/536,841  
; PRIOR FILING DATE: 2000-03-27  
; NUMBER OF SEQ ID NOS: 590  
; SOFTWARE: FastSeq for Windows Version 4.0  
; SEQ ID NO 444  
; LENGTH: 16  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Template sequence  
US-10-730-771-444

Query Match 2.8%; Score 12.8; DB 1; Length 16;  
Best Local Similarity 87.5%; Pred. No. 2.4e+02;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 24 AGGGTGTGGGCATT 39  
Db 1 AGGGTGTGGGCAGT 16

RESULT 315  
US-09-961-077-828  
; Sequence 828, Application US/09961077  
; Publication No. US20030014775A1  
; GENERAL INFORMATION:  
; APPLICANT: Zwick, Michael G.  
; Edington, Brent E.  
; McSwiggen, James A.  
; Merlo, Patricia Ann Owens  
; Guo, Lining  
; Skokut, Thomas A.  
; Young, Scott A.  
; Folkerts, Otto  
; Merlo, Donald J.  
; TITLE OF INVENTION: COMPOSITION AND METHODS FOR  
; MODULATION OF GENE EXPRESSION  
; IN PLANTS  
; NUMBER OF SEQUENCES: 1263  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Lyon & Lyon  
; STREET: 633 West Fifth Street  
; Suite 4700  
; CITY: Los Angeles  
; STATE: California  
; COUNTRY: U.S.A.  
; ZIP: 90071-2066  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: 3.5" Diskette, 1.44 Mb  
; storage  
; COMPUTER: IBM Compatible  
; OPERATING SYSTEM: IBM P.C. DOS 5.0  
; SOFTWARE: Word Perfect 5.1

CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/09/961,077  
; FILING DATE: 21-Sep-2001  
; CLASSIFICATION: <Unknown>  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: 08/679,645  
; FILING DATE: July 12, 1996  
; APPLICATION NUMBER: 60/001,135  
; FILING DATE: July 13, 1995  
; APPLICATION NUMBER: 08/300,726  
; FILING DATE: September 2, 1994  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Warburg, Richard J.  
; REGISTRATION NUMBER: 32,327  
; REFERENCE/DOCKET NUMBER: 219/247  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (213) 489-1600  
; TELEFAX: (213) 955-0440  
; TELEX: 67-3510  
; INFORMATION FOR SEQ ID NO: 828:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 17 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; SEQUENCE DESCRIPTION: SEQ ID NO: 828:  
US-09-961-077-828

Query Match 2.8%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 62.5%; Pred. No. 2.7e+02;  
Matches 10; Conservative 4; Mismatches 2; Indels 0; Gaps 0;  
QY 107 GCTGACTTTCAGCGG 122  
Db 1 GCUGCCUUCACGCG 16

RESULT 316  
US-09-780-533A-27/c  
; Sequence 27, Application US/09780533A  
; Publication No. US20030060611A1  
; GENERAL INFORMATION:  
; APPLICANT: Ribozyme Pharmaceuticals, Inc.  
; APPLICANT: Blatt, Larry  
; APPLICANT: McSwiggen, Jim  
; APPLICANT: Chowirza, Bharat  
; APPLICANT: Haeblerli, Pete  
; TITLE OF INVENTION: Method and Reagent for the Inhibition of NOGO Gene  
; FILE REFERENCE: MBH00,878-A (400/011)  
; CURRENT APPLICATION NUMBER: US/09/780,533A  
; CURRENT FILING DATE: 2001-02-09  
; PRIOR APPLICATION NUMBER: US 60/181,797  
; PRIOR FILING DATE: 2000-02-11  
; NUMBER OF SEQ ID NOS: 6679  
; SOFTWARE: PatentIn version 3.0  
; SEQ ID NO 27  
; LENGTH: 17  
; TYPE: RNA  
; ORGANISM: Homo sapiens  
US-09-780-533A-27

Query Match 2.8%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 87.5%; Pred. No. 2.7e+02;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 253 GGCGCGGTGCGCCCG 268  
Db 16 GGCGCGGACAGCCCG 1

RESULT 317  
US-09-780-533A-58/c  
; Sequence 58, Application US/09780533A

```
; Publication No. US20030060611A1
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals, Inc.
; APPLICANT: Blatt, Larry
; APPLICANT: McSwiggen, Jim
; APPLICANT: Chowrira, Bharat
; APPLICANT: Haeblerli, Pete
; TITLE OF INVENTION: Method and Reagent for the Inhibition of NOGO Gene
; FILE REFERENCE: MBH00.878-A (400/011)
; CURRENT APPLICATION NUMBER: US/09/780.533A
; CURRENT FILING DATE: 2001-02-09
; PRIOR APPLICATION NUMBER: US 60/181,797
; PRIOR FILING DATE: 2000-02-11
; NUMBER OF SEQ ID NOS: 6679
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 58
; LENGTH: 17
; TYPE: RNA
; ORGANISM: Homo sapiens
; US-09-780-533A-58

Query Match          2.8%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 2.7e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 363 GCCGAGGAAGAGGAA 378
Db 17 GCAGCAGGAAGAGCAA 2

RESULT 318
US-09-780-533A-59/c
; Sequence 59, Application US/09780533A
; Publication No. US20030060611A1
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals, Inc.
; APPLICANT: Blatt, Larry
; APPLICANT: McSwiggen, Jim
; APPLICANT: Chowrira, Bharat
; APPLICANT: Haeblerli, Pete
; TITLE OF INVENTION: Method and Reagent for the Inhibition of NOGO Gene
; FILE REFERENCE: MBH00.878-A (400/011)
; CURRENT APPLICATION NUMBER: US/09/780.533A
; CURRENT FILING DATE: 2001-02-09
; PRIOR APPLICATION NUMBER: US 60/181,797
; PRIOR FILING DATE: 2000-02-11
; NUMBER OF SEQ ID NOS: 6679
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 59
; LENGTH: 17
; TYPE: RNA
; ORGANISM: Homo sapiens
; US-09-780-533A-59

Query Match          2.8%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 2.7e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 363 GCCGAGGAAGAGGAA 378
Db 16 GCAGCAGGAAGAGCAA 1

RESULT 319
US-09-780-533A-1810/c
; Sequence 1810, Application US/09780533A
; Publication No. US20030060611A1
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals, Inc.
; APPLICANT: Blatt, Larry
; APPLICANT: McSwiggen, Jim
; APPLICANT: Chowrira, Bharat
; APPLICANT: Haeblerli, Pete
```

```
; TITLE OF INVENTION: Method and Reagent for the Inhibition of NOGO Gene
; FILE REFERENCE: MBH00.878-A (400/011)
; CURRENT APPLICATION NUMBER: US/09/780.533A
; CURRENT FILING DATE: 2001-02-09
; PRIOR APPLICATION NUMBER: US 60/181,797
; PRIOR FILING DATE: 2000-02-11
; NUMBER OF SEQ ID NOS: 6679
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 1810
; LENGTH: 17
; TYPE: RNA
; ORGANISM: Homo sapiens
; US-09-780-533A-1810

Query Match          2.8%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 2.7e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 254 GCCGCGGTGCGCCGG 269
Db 17 GCCGCGGACAGCCCGG 2

RESULT 320
US-09-877-478-1053/c
; Sequence 1053, Application US/09877478
; Publication No. US20030068301A1
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals, Inc.
; APPLICANT: Draper, Kenneth
; APPLICANT: Blatt, Larry
; APPLICANT: McSwiggen, Jim
; APPLICANT: Morrissey, Dave
; TITLE OF INVENTION: Method and Reagent for Inhibiting Hepatitis B Virus Replication
; FILE REFERENCE: MBH00-845-H (400/029)
; CURRENT APPLICATION NUMBER: US/09/877,478
; CURRENT FILING DATE: 2001-12-31
; PRIOR APPLICATION NUMBER: US 07/882,712
; PRIOR FILING DATE: 1992-05-14
; PRIOR APPLICATION NUMBER: US 09/531,025
; PRIOR FILING DATE: 2000-03-20
; PRIOR APPLICATION NUMBER: US 09/636,385
; PRIOR FILING DATE: 2000-08-09
; PRIOR APPLICATION NUMBER: US 09/696,347
; PRIOR FILING DATE: 2000-10-24
; PRIOR APPLICATION NUMBER: US 08/193,627
; PRIOR FILING DATE: 1994-02-07
; PRIOR APPLICATION NUMBER: US 08/433,993
; PRIOR FILING DATE: 1995-05-04
; PRIOR APPLICATION NUMBER: US 08/434,504
; PRIOR FILING DATE: 1995-05-04
; PRIOR APPLICATION NUMBER: US 09/436,430
; PRIOR FILING DATE: 1999-11-08
; NUMBER OF SEQ ID NOS: 6586
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 1053
; LENGTH: 17
; TYPE: RNA
; ORGANISM: Hepatitis B virus
; US-09-877-478-1053

Query Match          2.8%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 2.7e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 117 AGCGCGCGGAAAGCC 132
Db 16 AGCGCGGTAGAGCC 1

RESULT 321
US-09-848-754A-1036/c
; Sequence 1036, Application US/09848754A
```

Best Local Similarity	87.5%	Pred. No. 2.7e+02;	
Matches	14;	Conservative	0; Mismatches 2; Indels 0; Gaps 0;
Qy	199	CCCTCCCGGGACCTG 214	
Db	17	CTCTCCCGGGCGCTG 2	
RESULT 324			
US-09-848-754A-1039/c			
; Sequence 1039, Application US/09848754A			
; Publication No. US20030073207A1			
; GENERAL INFORMATION:			
; APPLICANT: Ribozyme Pharmaceuticals, Inc.			
; TITLE OF INVENTION: Enzymatic Nucleic Acid Treatment of Diseases or Conditions			
; FILE REFERENCE: MBHB00-958-I (400/018)			
; CURRENT APPLICATION NUMBER: US/09/848,754A			
; CURRENT FILING DATE: 2001-05-03			
; NUMBER OF SEQ ID NOS: 9645			
; SOFTWARE: PatentIn version 3.0			
; SEQ ID NO 1039			
; LENGTH: 17			
; TYPE: RNA			
; ORGANISM: Homo sapiens			
US-09-848-754A-1039			
Query Match			
Best Local Similarity 87.5%; Score 12.8; DB 1; Length 17;			
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;			
Qy	199	CCCTCCCGGGACCTG 214	
Db	16	CTCTCCCGGGCGCTG 1	
RESULT 325			
US-09-848-754A-1653			
; Sequence 1653, Application US/09848754A			
; Publication No. US20030073207A1			
; GENERAL INFORMATION:			
; APPLICANT: Ribozyme Pharmaceuticals, Inc.			
; TITLE OF INVENTION: Enzymatic Nucleic Acid Treatment of Diseases or Conditions			
; FILE REFERENCE: MBHB00-958-I (400/018)			
; CURRENT APPLICATION NUMBER: US/09/848,754A			
; CURRENT FILING DATE: 2001-05-03			
; NUMBER OF SEQ ID NOS: 9645			
; SOFTWARE: PatentIn version 3.0			
; SEQ ID NO 1653			
; LENGTH: 17			
; TYPE: RNA			
; ORGANISM: Homo sapiens			
US-09-848-754A-1653			
Query Match			
Best Local Similarity 87.5%; Score 12.8; DB 1; Length 17;			
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;			
Qy	231	CAGCCCCCGAACCCCG 246	
Db	2	CAGCCUCUGAACCCCG 17	
RESULT 326			
US-09-776-474-7/c			
; Sequence 7, Application US/09776474			
; Publication No. US20030087847A1			
; GENERAL INFORMATION:			
; APPLICANT: Ribozyme Pharmaceuticals, Inc.			
; APPLICANT: Jarvis, Thale			
; APPLICANT: Bocher, Robert			
; APPLICANT: Holman, Patricia			

```
; APPLICANT: Fattaey, Ali
; APPLICANT: McSwiggen, Jim
; TITLE OF INVENTION: Method and Reagent for the Inhibition of Checkpoint Kinase-1 (CHK)
; TITLE OF INVENTION: Enzyme
; FILE REFERENCE: MBH00-955-A (400/008)
; CURRENT APPLICATION NUMBER: US/09/776,474
; CURRENT FILING DATE: 2001-02-02
; PRIOR APPLICATION NUMBER: US 60/179,983
; PRIOR FILING DATE: 2000-03-02
; NUMBER OF SEQ ID NOS: 2992
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 7
; LENGTH: 17
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Nucleic Acid
US-09-776-474-7

Query Match      2.8%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 2.7e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 272 CTCTCCGGAGGCACC 287
Db      ||||| |||||
17 CTCTCCATAGGCACC 2

RESULT 327
US-09-930-423-333/c
; Sequence 333, Application US/09930423
; Publication No. US20030092003A1
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals, Inc.
; APPLICANT: Blatt, Larry
; APPLICANT: McSwiggen, Jim
; TITLE OF INVENTION: Method and Reagent for the Treatment of Alzheimer's Disease
; FILE REFERENCE: MBH00,918-A 400/027
; CURRENT APPLICATION NUMBER: US/09/930,423
; CURRENT FILING DATE: 2001-08-15
; NUMBER OF SEQ ID NOS: 4553
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 333
; LENGTH: 17
; TYPE: RNA
; ORGANISM: Homo Sapiens
US-09-930-423-333

Query Match      2.8%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 2.7e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 16 GGCCTGGAGGGGTGG 31
Db      || ||||| |||||
17 GGGCTGGAGGGGCGG 2

RESULT 328
US-09-930-423-334/c
; Sequence 334, Application US/09930423
; Publication No. US20030092003A1
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals, Inc.
; APPLICANT: Blatt, Larry
; APPLICANT: McSwiggen, Jim
; TITLE OF INVENTION: Method and Reagent for the Treatment of Alzheimer's Disease
; FILE REFERENCE: MBH00,918-A 400/027
; CURRENT APPLICATION NUMBER: US/09/930,423
; CURRENT FILING DATE: 2001-08-15
; NUMBER OF SEQ ID NOS: 4553
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 334
; LENGTH: 17
```

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; TYPE: RNA
; ORGANISM: Homo Sapiens
US-09-930-423-334

Query Match      2.8%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 2.7e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 15 GGGCTGGAGGGGTG 30
Db      ||||| |||||
16 GGGCTGGAGGGGCG 1

RESULT 329
US-09-930-423-335/c
; Sequence 335, Application US/09930423
; Publication No. US20030092003A1
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals, Inc.
; APPLICANT: Blatt, Larry
; APPLICANT: McSwiggen, Jim
; TITLE OF INVENTION: Method and Reagent for the Treatment of Alzheimer's Disease
; FILE REFERENCE: MBH00,918-A 400/027
; CURRENT APPLICATION NUMBER: US/09/930,423
; CURRENT FILING DATE: 2001-08-15
; NUMBER OF SEQ ID NOS: 4553
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 335
; LENGTH: 17
; TYPE: RNA
; ORGANISM: Homo Sapiens
US-09-930-423-335

Query Match      2.8%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 2.7e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 13 GTGGGCTGGAGGGG 28
Db      ||||| |||||
17 GCGGGCTGGAGGGG 2

RESULT 330
US-09-930-423-1159/c
; Sequence 1159, Application US/09930423
; Publication No. US20030092003A1
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals, Inc.
; APPLICANT: Blatt, Larry
; APPLICANT: McSwiggen, Jim
; TITLE OF INVENTION: Method and Reagent for the Treatment of Alzheimer's Disease
; FILE REFERENCE: MBH00,918-A 400/027
; CURRENT APPLICATION NUMBER: US/09/930,423
; CURRENT FILING DATE: 2001-08-15
; NUMBER OF SEQ ID NOS: 4553
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 1159
; LENGTH: 17
; TYPE: RNA
; ORGANISM: Homo Sapiens
US-09-930-423-1159

Query Match      2.8%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 2.7e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 12 GGTGGCTGGAGGG 27
Db      ||||| |||||
16 GCGGGCTGGAGGG 1

RESULT 331
US-09-930-423-1470
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; Sequence 1470, Application US/09930423
; Publication No. US20030092003A1
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals, Inc.
; APPLICANT: Blatt, Larry
; APPLICANT: McSwiggen, Jim
; TITLE OF INVENTION: Method and Reagent for the Treatment of Alzheimer's Disease
; FILE REFERENCE: MBH00,918-A 400/027
; CURRENT APPLICATION NUMBER: US/09/930,423
; CURRENT FILING DATE: 2001-08-15
; NUMBER OF SEQ ID NOS: 4553
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 1470
; LENGTH: 17
; TYPE: RNA
; ORGANISM: Homo Sapiens
US-09-930-423-1470

Query Match          2.8%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 2.7e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 242 CCCCGCGCTGGAGCCG 257
Db 2 CCCCGCGGAGCCCG 17

RESULT 332
US-09-827-395A-899
; Sequence 899, Application US/09827395A
; Publication No. US20030113891A1
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals, Inc.
; APPLICANT: Lawrence Blatt
; APPLICANT: James McSwiggen
; APPLICANT: Bharat Chowrira
; TITLE OF INVENTION: Method and Reagent for the Inhibition of NOGO and NOGO Receptor G
; FILE REFERENCE: MBH00-878-C (400/017)
; CURRENT APPLICATION NUMBER: US/09/827,395A
; CURRENT FILING DATE: 2001-04-05
; PRIOR APPLICATION NUMBER: 09/780,533
; PRIOR FILING DATE: 2001-02-09
; PRIOR APPLICATION NUMBER: 60/181,797
; PRIOR FILING DATE: 2000-02-11
; NUMBER OF SEQ ID NOS: 2617
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 899
; LENGTH: 17
; TYPE: RNA
; ORGANISM: Homo sapiens
US-09-827-395A-899

Query Match          2.8%; Score 12.8; DB 1; Length 17;
Best Local Similarity 75.0%; Pred. No. 2.7e+02;
Matches 12; Conservative 2; Mismatches 2; Indels 0; Gaps 0;

QY 263 GGCCCCGGGCGTCTCC 278
Db 2 GGCCCCGGGCGUGUCC 17

RESULT 333
US-09-740-332-1425
; Sequence 1425, Application US/09740332
; Publication No. US20030125270A1
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals Inc.
; TITLE OF INVENTION: Enzymatic Nucleic Acid Treatment of Diseases or Conditions Relate
; FILE REFERENCE: RPI 400/003
; CURRENT APPLICATION NUMBER: US/09/740,332
; CURRENT FILING DATE: 2001-03-26
; NUMBER OF SEQ ID NOS: 9704
```

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; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 1425
; LENGTH: 17
; TYPE: RNA
; ORGANISM: artificial sequence
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION:
; OTHER INFORMATION: oligonucleotide substrate
US-09-740-332-1425

Query Match          2.8%; Score 12.8; DB 1; Length 17;
Best Local Similarity 75.0%; Pred. No. 2.7e+02;
Matches 12; Conservative 2; Mismatches 2; Indels 0; Gaps 0;

QY 20 TGGGAGGGGTGGTGGC 35
Db 2 UGGGAGGGUGGGGCGC 17

RESULT 334
US-09-740-332-3639/c
; Sequence 3639, Application US/09740332
; Publication No. US20030125270A1
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals Inc.
; TITLE OF INVENTION: Enzymatic Nucleic Acid Treatment of Diseases or Conditions Relate
; FILE REFERENCE: RPI 400/003
; CURRENT APPLICATION NUMBER: US/09/740,332
; CURRENT FILING DATE: 2001-03-26
; NUMBER OF SEQ ID NOS: 9704
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 3639
; LENGTH: 17
; TYPE: RNA
; ORGANISM: artificial sequence
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION:
; OTHER INFORMATION: oligonucleotide substrate
US-09-740-332-3639

Query Match          2.8%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 2.7e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 208 GCACCTGCGGCGGTC 223
Db 16 GCACCTGCGGCGGTC 1

RESULT 335
US-09-740-332-3755/c
; Sequence 3755, Application US/09740332
; Publication No. US20030125270A1
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals Inc.
; TITLE OF INVENTION: Enzymatic Nucleic Acid Treatment of Diseases or Conditions Relate
; FILE REFERENCE: RPI 400/003
; CURRENT APPLICATION NUMBER: US/09/740,332
; CURRENT FILING DATE: 2001-03-26
; NUMBER OF SEQ ID NOS: 9704
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 3755
; LENGTH: 17
; TYPE: RNA
; ORGANISM: artificial sequence
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION:
; OTHER INFORMATION: oligonucleotide substrate
```



```

; LENGTH: 17
; TYPE: RNA
; ORGANISM: Homo sapiens
US-09-745-237A-1159

  Query Match      2.8%; Score 12.8; DB 1; Length 17;
  Best Local Similarity 87.5%; Pred. No. 2.7e+02;
  Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 12 GGTGGGCGCTGGAGGG 27
   || || || || || || || ||
Db 16 GCGGCGGCGCTGGAGGG 1

RESULT 341
US-09-745-237A-1470
; Sequence 1470, Application US/09745237A
; Publication No. US20030143708A1
; GENERAL INFORMATION: Ribozyme Pharmaceuticals, Inc.
; APPLICANT: Ribozyme Pharmaceuticals, Inc.
; APPLICANT: Blatt, Larry
; APPLICANT: McSwiggen, Jim
; TITLE OF INVENTION: Method and Reagent for the Treatment of Alzheimer's Disease
; FILE REFERENCE: 400/007 (MBHB00-918-A)
; CURRENT APPLICATION NUMBER: US/09/745,237A
; CURRENT FILING DATE: 2002-04-15
; NUMBER OF SEQ ID NOS: 4550
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 1470
; LENGTH: 17
; TYPE: RNA
; ORGANISM: Homo sapiens
US-09-745-237A-1470

  Query Match      2.8%; Score 12.8; DB 1; Length 17;
  Best Local Similarity 87.5%; Pred. No. 2.7e+02;
  Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 242 CCCCGCGCTGGAGCCG 257
   || || || || || || || ||
Db 2 CCCCGCGGAGGCCG 17

RESULT 342
US-09-817-879-1425
; Sequence 1425, Application US/09817879
; Publication No. US2003017131A1
; GENERAL INFORMATION: Ribozyme Pharmaceuticals Inc.
; APPLICANT: Ribozyme Pharmaceuticals Inc.
; TITLE OF INVENTION: Enzymatic Nucleic Acid Treatment of Diseases or Conditions Relate
; FILE REFERENCE: MBHB00-801-F
; CURRENT APPLICATION NUMBER: US/09/817,879
; CURRENT FILING DATE: 2001-03-26
; NUMBER OF SEQ ID NOS: 9703
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 1425
; LENGTH: 17
; TYPE: RNA
; ORGANISM: artificial sequence
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION:
; OTHER INFORMATION: oligonucleotide substrate
US-09-817-879-1425

  Query Match      2.8%; Score 12.8; DB 1; Length 17;
  Best Local Similarity 75.0%; Pred. No. 2.7e+02;
  Matches 12; Conservative 2; Mismatches 2; Indels 0; Gaps 0;

QY 20 TGGGAGGGGTGTGGC 35
   : || || || || || || || ||
Db 2 UGGGAGGGUGGUGGCC 17
```

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RESULT 343
US-09-817-879-3639/c
; Sequence 3639, Application US/09817879
; Publication No. US2003017131A1
; GENERAL INFORMATION: Ribozyme Pharmaceuticals Inc.
; APPLICANT: Ribozyme Pharmaceuticals Inc.
; TITLE OF INVENTION: Enzymatic Nucleic Acid Treatment of Diseases or Conditions Relate
; FILE REFERENCE: MBHB00-801-F
; CURRENT APPLICATION NUMBER: US/09/817,879
; CURRENT FILING DATE: 2001-03-26
; NUMBER OF SEQ ID NOS: 9703
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 3639
; LENGTH: 17
; TYPE: RNA
; ORGANISM: artificial sequence
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION:
; OTHER INFORMATION: oligonucleotide substrate
US-09-817-879-3639

  Query Match      2.8%; Score 12.8; DB 1; Length 17;
  Best Local Similarity 87.5%; Pred. No. 2.7e+02;
  Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 208 GGACCTGCGCGGGTC 223
   || || || || || || || ||
Db 16 GCACCTGCGCGGGTC 1

RESULT 344
US-09-817-879-3755/c
; Sequence 3755, Application US/09817879
; Publication No. US2003017131A1
; GENERAL INFORMATION: Ribozyme Pharmaceuticals Inc.
; APPLICANT: Ribozyme Pharmaceuticals Inc.
; TITLE OF INVENTION: Enzymatic Nucleic Acid Treatment of Diseases or Conditions Relate
; FILE REFERENCE: MBHB00-801-F
; CURRENT APPLICATION NUMBER: US/09/817,879
; CURRENT FILING DATE: 2001-03-26
; NUMBER OF SEQ ID NOS: 9703
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 3755
; LENGTH: 17
; TYPE: RNA
; ORGANISM: artificial sequence
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION:
; OTHER INFORMATION: oligonucleotide substrate
US-09-817-879-3755

  Query Match      2.8%; Score 12.8; DB 1; Length 17;
  Best Local Similarity 87.5%; Pred. No. 2.7e+02;
  Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 433 GGACTCGGCTCACACA 448
   || || || || || || || ||
Db 17 GGACTCGGCGCCACACA 2

RESULT 345
US-10-060-895A-738/c
; Sequence 738, Application US/10060895A
; Publication No. US20030104403A1
; GENERAL INFORMATION:
; APPLICANT: Zhang, Jian
; APPLICANT: Gu, Yizhong
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; APPLICANT: Nguyen, Cung-Tuong
; TITLE OF INVENTION: HUMAN UDP-GALNAC:POLYPEPTIDE N-ACETYL GALACTOSAMINYLTRANSFERASE 10
; FILE REFERENCE: PB0158
; CURRENT APPLICATION NUMBER: US/10/060,895A
; CURRENT FILING DATE: 2002-06-10
; PRIOR APPLICATION NUMBER: PCT/US01/00666
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00667
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00664
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00669
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00665
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00668
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00663
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00670
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: US 09/864,761
; PRIOR FILING DATE: 2001-05-23
; PRIOR APPLICATION NUMBER: US 60/315,984
; PRIOR FILING DATE: 2001-08-30
; NUMBER OF SEQ ID NOS: 1682
; SOFTWARE: Acomica Sequence Listing Engine
; SEQ ID NO 738
; LENGTH: 17
; TYPE: DNA
; ORGANISM: Homo sapiens
; US-10-060-895A-738

Query Match          2.8%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 2.7e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY      343 GCGAGGTTGAGGCCTT 358
Db      17 GCGCGGATCAGGCCTT 2

RESULT 346
US-10-060-895A-739/c
; Sequence 739, Application US/10060895A
; Publication No. US20030104403A1
; GENERAL INFORMATION:
; APPLICANT: Zhang, Jian
; APPLICANT: Gu, Yizhong
; APPLICANT: Nguyen, Cung-Tuong
; TITLE OF INVENTION: HUMAN UDP-GALNAC:POLYPEPTIDE N-ACETYL GALACTOSAMINYLTRANSFERASE 10
; FILE REFERENCE: PB0158
; CURRENT APPLICATION NUMBER: US/10/060,895A
; CURRENT FILING DATE: 2002-06-10
; PRIOR APPLICATION NUMBER: PCT/US01/00666
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00667
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00664
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00669
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00665
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00668
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00663
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00670
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: US 09/864,761
; PRIOR FILING DATE: 2001-05-23
; PRIOR APPLICATION NUMBER: US 60/315,984

Query Match          2.8%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 2.7e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY      343 GCGAGGTTGAGGCCTT 358
Db      17 GCGCGGATCAGGCCTT 2

RESULT 347
US-10-163-552-20/c
; Sequence 20, Application US/10163552
; Publication No. US20030105051A1
; GENERAL INFORMATION:
; APPLICANT: McSwiggen, Jim
; APPLICANT: Ribozyme Pharmaceuticals, Inc.
; TITLE OF INVENTION: Nucleic acid treatment of diseases or conditions related to level:
; TITLE OF INVENTION: HER2
; FILE REFERENCE: MEHB01-1653-A (400/014)
; CURRENT APPLICATION NUMBER: US/10/163,552
; CURRENT FILING DATE: 2002-06-06
; NUMBER OF SEQ ID NOS: 1997
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 20
; LENGTH: 17
; TYPE: RNA
; ORGANISM: Homo sapiens
; US-10-163-552-20

Query Match          2.8%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 2.7e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY      21 GCGAGGGGTGGTGGCC 36
Db      17 GCGAGGGGTGGGGGCC 2

RESULT 348
US-10-163-552-869/c
; Sequence 869, Application US/10163552
; Publication No. US20030105051A1
; GENERAL INFORMATION:
; APPLICANT: McSwiggen, Jim
; APPLICANT: Ribozyme Pharmaceuticals, Inc.
; TITLE OF INVENTION: Nucleic acid treatment of diseases or conditions related to level:
; TITLE OF INVENTION: HER2
; FILE REFERENCE: MEHB01-1653-A (400/014)
; CURRENT APPLICATION NUMBER: US/10/163,552
; CURRENT FILING DATE: 2002-06-06
; NUMBER OF SEQ ID NOS: 1997
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 869
; LENGTH: 17
; TYPE: RNA
; ORGANISM: Homo sapiens
; US-10-163-552-869

Query Match          2.8%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 2.7e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY      6 GCGAGGGGTGGGCCTG 21
Db      17 GCGAGGGGTGGGCCTG 21
```

```
; APPLICANT: Nguyen, Cung-Tuong
; TITLE OF INVENTION: HUMAN UDP-GALNAC:POLYPEPTIDE N-ACETYL GALACTOSAMINYLTRANSFERASE 10
; FILE REFERENCE: PB0158
; CURRENT APPLICATION NUMBER: US/10/060,895A
; CURRENT FILING DATE: 2002-06-10
; PRIOR APPLICATION NUMBER: PCT/US01/00666
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00667
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00664
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00669
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00665
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00668
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00663
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00670
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: US 09/864,761
; PRIOR FILING DATE: 2001-05-23
; PRIOR APPLICATION NUMBER: US 60/315,984
; PRIOR FILING DATE: 2001-08-30
; NUMBER OF SEQ ID NOS: 1682
; SOFTWARE: Acomica Sequence Listing Engine
; SEQ ID NO 738
; LENGTH: 17
; TYPE: DNA
; ORGANISM: Homo sapiens
; US-10-060-895A-738

Query Match          2.8%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 2.7e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY      343 GCGAGGTTGAGGCCTT 358
Db      17 GCGCGGATCAGGCCTT 2

RESULT 346
US-10-060-895A-739/c
; Sequence 739, Application US/10060895A
; Publication No. US20030104403A1
; GENERAL INFORMATION:
; APPLICANT: Zhang, Jian
; APPLICANT: Gu, Yizhong
; APPLICANT: Nguyen, Cung-Tuong
; TITLE OF INVENTION: HUMAN UDP-GALNAC:POLYPEPTIDE N-ACETYL GALACTOSAMINYLTRANSFERASE 10
; FILE REFERENCE: PB0158
; CURRENT APPLICATION NUMBER: US/10/060,895A
; CURRENT FILING DATE: 2002-06-10
; PRIOR APPLICATION NUMBER: PCT/US01/00666
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00667
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00664
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00669
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00665
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00668
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00663
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00670
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: US 09/864,761
; PRIOR FILING DATE: 2001-05-23
; PRIOR APPLICATION NUMBER: US 60/315,984
```



```
Db      17 GAGGAGCGTGGGCTG 2

RESULT 349
US-10-156-306-4930
; Sequence 4930, Application US/10156306
; Publication No. US20030119017A1
; GENERAL INFORMATION:
; APPLICANT: McSwiggen Pharmaceuticals, Inc.
; TITLE OF INVENTION: Enzymatic Nucleic Acid Treatment of Diseases or Conditions Related to Level
; FILE REFERENCE: MBH01-664-A (400/050)
; CURRENT APPLICATION NUMBER: US/10/156,306
; CURRENT FILING DATE: 2002-05-28
; NUMBER OF SEQ ID NOS: 8013
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 4930
; LENGTH: 17
; TYPE: RNA
; ORGANISM: Homo sapiens
US-10-156-306-4930

Query Match      2.8%; Score 12.8; DB 1; Length 17;
Best Local Similarity 75.0%; Pred. No. 2.7e+02;
Matches 12; Conservative 2; Mismatches 2; Indels 0; Gaps 0;

QY      249 TGGAGCGCCGCGTCCG 284
;|||||:|:|
Db      2 UGGAGCGCGCGUCCG 17

RESULT 350
US-10-156-306-6942
; Sequence 6942, Application US/10156306
; Publication No. US20030119017A1
; GENERAL INFORMATION:
; APPLICANT: McSwiggen Pharmaceuticals, Inc.
; TITLE OF INVENTION: Enzymatic Nucleic Acid Treatment of Diseases or Conditions Related to Level
; FILE REFERENCE: MBH01-664-A (400/050)
; CURRENT APPLICATION NUMBER: US/10/156,306
; CURRENT FILING DATE: 2002-05-28
; NUMBER OF SEQ ID NOS: 8013
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 6942
; LENGTH: 17
; TYPE: RNA
; ORGANISM: Homo sapiens
US-10-156-306-6942

Query Match      2.8%; Score 12.8; DB 1; Length 17;
Best Local Similarity 75.0%; Pred. No. 2.7e+02;
Matches 12; Conservative 2; Mismatches 2; Indels 0; Gaps 0;

QY      246 GCCTGAGCGCCGCGT 281
;||:|||||:
Db      2 GCGUGAGCGCGGCU 17

RESULT 351
US-10-238-700-2700/c
; Sequence 2700, Application US/10238700
; Publication No. US20030153521A1
; GENERAL INFORMATION:
; APPLICANT: McSwiggen Pharmaceuticals, Inc.
; TITLE OF INVENTION: Nucleic Acid Treatment of Diseases or Conditions Related to Level
; FILE REFERENCE: 400/057 (MBH01-1158-A)
; CURRENT APPLICATION NUMBER: US/10/238,700
; CURRENT FILING DATE: 2002-09-18
; PRIOR APPLICATION NUMBER: PCT/US 02/16840
; PRIOR FILING DATE: 2002-05-29
; PRIOR APPLICATION NUMBER: US 60/318,471
; NUMBER OF SEQ ID NOS: 4666
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 3508
; LENGTH: 17
; TYPE: RNA
; ORGANISM: Homo sapiens
```

```
; PRIOR FILING DATE: 2002-05-29
; PRIOR APPLICATION NUMBER: US 60/318,471
; PRIOR FILING DATE: 2001-09-10
; NUMBER OF SEQ ID NOS: 4666
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 2700
; LENGTH: 17
; TYPE: RNA
; ORGANISM: Homo sapiens
US-10-238-700-2700

Query Match      2.8%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 2.7e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY      254 GCCGCGTCCGCCCG 269
;|||||:|:|
Db      16 GCCGCGTCCGCCGG 1

RESULT 352
US-10-238-700-2821
; Sequence 2821, Application US/10238700
; Publication No. US20030153521A1
; GENERAL INFORMATION:
; APPLICANT: McSwiggen Pharmaceuticals, Inc.
; TITLE OF INVENTION: Nucleic Acid Treatment of Diseases or Conditions Related to Level
; FILE REFERENCE: 400/057 (MBH01-1158-A)
; CURRENT APPLICATION NUMBER: US/10/238,700
; CURRENT FILING DATE: 2002-09-18
; PRIOR APPLICATION NUMBER: PCT/US 02/16840
; PRIOR FILING DATE: 2002-05-29
; PRIOR APPLICATION NUMBER: US 60/318,471
; PRIOR FILING DATE: 2001-09-10
; NUMBER OF SEQ ID NOS: 4666
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 2821
; LENGTH: 17
; TYPE: RNA
; ORGANISM: Homo sapiens
US-10-238-700-2821

Query Match      2.8%; Score 12.8; DB 1; Length 17;
Best Local Similarity 75.0%; Pred. No. 2.7e+02;
Matches 12; Conservative 2; Mismatches 2; Indels 0; Gaps 0;

QY      202 TCCCGGGACCTCGG 217
;|||:|:|:|:|
Db      1 UCCCGGGCGCCGCG 16

RESULT 353
US-10-238-700-3508/c
; Sequence 3508, Application US/10238700
; Publication No. US20030153521A1
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals, Inc.
; APPLICANT: McSwiggen, James
; TITLE OF INVENTION: Nucleic Acid Treatment of Diseases or Conditions Related to Level
; FILE REFERENCE: 400/057 (MBH01-1158-A)
; CURRENT APPLICATION NUMBER: US/10/238,700
; CURRENT FILING DATE: 2002-09-18
; PRIOR APPLICATION NUMBER: PCT/US 02/16840
; PRIOR FILING DATE: 2002-05-29
; PRIOR APPLICATION NUMBER: US 60/318,471
; PRIOR FILING DATE: 2001-09-10
; NUMBER OF SEQ ID NOS: 4666
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 3508
; LENGTH: 17
; TYPE: RNA
; ORGANISM: Homo sapiens
```

US-10-238-700-3508

Query Match 2.8%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 87.5%; Pred. No. 2.7e+02;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 226 CTGCCAGCCCGGAA 241  
|||||  
Db 17 CTGCCAGCCCGTAA 2

RESULT 354

US-10-061-201-715  
; Sequence 715, Application US/10061201  
; Publication No. US20030166229A1  
; GENERAL INFORMATION:  
; APPLICANT: Shannon, Mark  
; TITLE OF INVENTION: HUMAN POSH-LIKE PROTEIN 1  
; FILE REFERENCE: PB0178  
; CURRENT APPLICATION NUMBER: US/10/061,201  
; PRIOR FILING DATE: 2002-01-30  
; PRIOR APPLICATION NUMBER: PCT/US01/00666  
; PRIOR FILING DATE: 2001-01-30  
; PRIOR APPLICATION NUMBER: PCT/US01/00667  
; PRIOR FILING DATE: 2001-01-30  
; PRIOR APPLICATION NUMBER: PCT/US01/00664  
; PRIOR FILING DATE: 2001-01-30  
; PRIOR APPLICATION NUMBER: PCT/US01/00669  
; PRIOR FILING DATE: 2001-01-30  
; PRIOR APPLICATION NUMBER: PCT/US01/00665  
; PRIOR FILING DATE: 2001-01-30  
; PRIOR APPLICATION NUMBER: PCT/US01/00668  
; PRIOR FILING DATE: 2001-01-30  
; PRIOR APPLICATION NUMBER: PCT/US01/00663  
; PRIOR FILING DATE: 2001-01-30  
; PRIOR APPLICATION NUMBER: PCT/US01/00670  
; PRIOR FILING DATE: 2001-01-30  
; PRIOR APPLICATION NUMBER: US 09/864,761  
; PRIOR FILING DATE: 2001-05-23  
; PRIOR APPLICATION NUMBER: US 60/328,205  
; PRIOR FILING DATE: 2001-10-10  
; NUMBER OF SEQ ID NOS: 4162  
; SOFTWARE: Aemica Sequence Listing Engine  
; SEQ ID NO 715  
; LENGTH: 17  
; TYPE: DNA  
; ORGANISM: Homo sapiens  
US-10-061-201-715

Query Match 2.8%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 87.5%; Pred. No. 2.7e+02;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 272 CTTCTCCGGAGGCACC 287  
|||||  
Db 2 CTTCTCCGGAGACGC 17

RESULT 355

US-10-061-201-716  
; Sequence 716, Application US/10061201  
; Publication No. US20030166229A1  
; GENERAL INFORMATION:  
; APPLICANT: Shannon, Mark  
; TITLE OF INVENTION: HUMAN POSH-LIKE PROTEIN 1  
; FILE REFERENCE: PB0178  
; CURRENT APPLICATION NUMBER: US/10/061,201  
; PRIOR FILING DATE: 2002-01-30  
; PRIOR APPLICATION NUMBER: PCT/US01/00666  
; PRIOR FILING DATE: 2001-01-30  
; PRIOR APPLICATION NUMBER: PCT/US01/00667  
; PRIOR FILING DATE: 2001-01-30  
; PRIOR APPLICATION NUMBER: PCT/US01/00664

; PRIOR FILING DATE: 2001-01-30  
; PRIOR APPLICATION NUMBER: PCT/US01/00669  
; PRIOR FILING DATE: 2001-01-30  
; PRIOR APPLICATION NUMBER: PCT/US01/00665  
; PRIOR FILING DATE: 2001-01-30  
; PRIOR APPLICATION NUMBER: PCT/US01/00668  
; PRIOR FILING DATE: 2001-01-30  
; PRIOR APPLICATION NUMBER: PCT/US01/00663  
; PRIOR FILING DATE: 2001-01-30  
; PRIOR APPLICATION NUMBER: PCT/US01/00670  
; PRIOR FILING DATE: 2001-01-30  
; PRIOR APPLICATION NUMBER: US 09/864,761  
; PRIOR FILING DATE: 2001-05-23  
; PRIOR APPLICATION NUMBER: US 60/328,205  
; PRIOR FILING DATE: 2001-10-10  
; NUMBER OF SEQ ID NOS: 4162  
; SOFTWARE: Aemica Sequence Listing Engine  
; SEQ ID NO 716  
; LENGTH: 17  
; TYPE: DNA  
; ORGANISM: Homo sapiens  
US-10-061-201-716

Query Match 2.8%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 87.5%; Pred. No. 2.7e+02;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 272 CTTCTCCGGAGGCACC 287  
|||||  
Db 1 CTTCTCCGGAGACGC 16

RESULT 356

US-10-230-006-1249/c  
; Sequence 1249, Application US/10230006  
; Publication No. US20030191077A1  
; GENERAL INFORMATION:  
; APPLICANT: Ribozyme Pharmaceuticals, Inc.  
; APPLICANT: McSwiggen, Kathy  
; TITLE OF INVENTION: METHOD AND REAGENT FOR THE TREATMENT OF ASTHMA AND ALLERGIC CONDIT  
; FILE REFERENCE: 400/056 (MBH01-1110)  
; CURRENT APPLICATION NUMBER: US/10/230,006  
; CURRENT FILING DATE: 2002-11-18  
; PRIOR APPLICATION NUMBER: US 60/315,315  
; PRIOR FILING DATE: 2001-08-28  
; NUMBER OF SEQ ID NOS: 2678  
; SOFTWARE: Patent in version 3.0  
; SEQ ID NO 1249  
; LENGTH: 17  
; TYPE: RNA  
; ORGANISM: Homo sapiens  
US-10-230-006-1249

Query Match 2.8%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 87.5%; Pred. No. 2.7e+02;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 389 CCCC GCCGCGCGCGG 404  
|||||  
Db 16 CTTCCGCGCGGCTCG 1

RESULT 357

US-10-230-006-1284  
; Sequence 1284, Application US/10230006  
; Publication No. US20030191077A1  
; GENERAL INFORMATION:  
; APPLICANT: Ribozyme Pharmaceuticals, Inc.  
; APPLICANT: Fosnaugh, Kathy  
; APPLICANT: McSwiggen, Jim  
; TITLE OF INVENTION: METHOD AND REAGENT FOR THE TREATMENT OF ASTHMA AND ALLERGIC CONDIT  
; FILE REFERENCE: 400/056 (MBH01-1110)

; CURRENT APPLICATION NUMBER: US/10/230,006  
; CURRENT FILING DATE: 2002-11-18  
; PRIOR APPLICATION NUMBER: US 60/315,315  
; PRIOR FILING DATE: 2001-08-28  
; NUMBER OF SEQ ID NOS: 2678  
; SOFTWARE: PatentIn version 3.0  
; SEQ ID NO 1284  
; LENGTH: 17  
; TYPE: RNA  
; ORGANISM: Homo sapiens  
US-10-230-006-1284

Query Match 2.8%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 68.8%; Pred. No. 2.7e+02;  
Matches 11; Conservative 3; Mismatches 2; Indels 0; Gaps 0;

QY 182 GCTGCTGGCCGCTCG 197  
DB 2 GCUGUGGCGCGCUCG 17

RESULT 358  
US-10-430-882-899  
; Sequence 899, Application US/10430882  
; Publication No. US20030203870A1  
; GENERAL INFORMATION:  
; APPLICANT: Ribozyme Pharmaceuticals, Inc.  
; APPLICANT: Lawrence Blatt  
; APPLICANT: James McSwiggen  
; APPLICANT: Bharat Chowira  
; APPLICANT: Peter Haeblerl  
; TITLE OF INVENTION: Method and Reagent for the Inhibition of NOGO and NOGO Receptor G  
; FILE REFERENCE: MBH800-878-H (400/112)  
; CURRENT APPLICATION NUMBER: US/10/430,882  
; CURRENT FILING DATE: 2003-05-06  
; PRIOR APPLICATION NUMBER: 09/827,395  
; PRIOR FILING DATE: 2001-04-05  
; PRIOR APPLICATION NUMBER: 09/780,533  
; PRIOR FILING DATE: 2001-02-09  
; PRIOR APPLICATION NUMBER: PCT/US01/04273  
; PRIOR FILING DATE: 2001-02-09  
; PRIOR APPLICATION NUMBER: 60/181,797  
; PRIOR FILING DATE: 2000-02-11  
; PRIOR APPLICATION NUMBER: PCT/US02/10512  
; PRIOR FILING DATE: 2002-04-03  
; NUMBER OF SEQ ID NOS: 2617  
; SOFTWARE: PatentIn version 3.0  
; SEQ ID NO 899  
; LENGTH: 17  
; TYPE: RNA  
; ORGANISM: Homo sapiens  
US-10-430-882-899

Query Match 2.8%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 75.0%; Pred. No. 2.7e+02;  
Matches 12; Conservative 2; Mismatches 2; Indels 0; Gaps 0;

QY 263 GCGCCGGGCTTCCTCC 278  
DB 2 GCGCCGGGCGUGUCC 17

RESULT 359  
US-10-297-068-1071/c  
; Sequence 1071, Application US/10297068  
; Publication No. US20030228585A1  
; GENERAL INFORMATION:  
; APPLICANT: INOKO, Hidetoshi  
; APPLICANT: KAGIYA, Taeko  
; APPLICANT: ICHIHARA, Tatsuao  
; APPLICANT: Matsumura, Yoshiyuki  
; APPLICANT: MORIYA, Shogo  
; APPLICANT: NISHIDA, Michio

; TITLE OF INVENTION: KIT AND METHOD FOR DETERMINING HLA TYPES  
; FILE REFERENCE: 13140P1174  
; CURRENT APPLICATION NUMBER: US/10/297,068  
; CURRENT FILING DATE: 2002-11-27  
; PRIOR APPLICATION NUMBER: JP 2000-164798  
; PRIOR FILING DATE: 2000-06-01  
; NUMBER OF SEQ ID NOS: 1298  
; SOFTWARE: PatentIn Ver. 2.1  
; SEQ ID NO 1071  
; LENGTH: 17  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Description of Artificial Sequence:capture  
US-10-297-068-1071

Query Match 2.8%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 87.5%; Pred. No. 2.7e+02;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 379 CGGAGCGAGTCCCGC 394  
DB 16 CGGAGCCAGTCCACGC 1

RESULT 360  
US-10-307-005-751  
; Sequence 751, Application US/10307005  
; Publication No. US20030236208A1  
; GENERAL INFORMATION:  
; APPLICANT: University of Delaware  
; APPLICANT: Eric B. Kmiec  
; APPLICANT: Howard B. Gamper  
; APPLICANT: Michael C. Rice  
; APPLICANT: Jungsup Kim  
; TITLE OF INVENTION: Targeted Chromosomal Genomic Alterations in Plants  
; FILE REFERENCE: Napro/009 PCT  
; CURRENT APPLICATION NUMBER: US/10/307,005  
; CURRENT FILING DATE: 2002-11-26  
; PRIOR APPLICATION NUMBER: PCT/US01/17672  
; PRIOR FILING DATE: 2001-06-01  
; PRIOR APPLICATION NUMBER: US 60/208,538  
; PRIOR FILING DATE: 2000-06-01  
; PRIOR APPLICATION NUMBER: US 60/244,989  
; PRIOR FILING DATE: 2000-10-30  
; PRIOR APPLICATION NUMBER: US 09/818,875  
; PRIOR FILING DATE: 2001-03-27  
; NUMBER OF SEQ ID NOS: 2717  
; SOFTWARE: Friedman macro Napro4  
; SEQ ID NO 751  
; LENGTH: 17  
; TYPE: DNA  
; ORGANISM: Zea mays  
US-10-307-005-751

Query Match 2.8%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 87.5%; Pred. No. 2.7e+02;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 410 CTGAGCTGTGGAGCT 425  
DB 1 CTGAGCTGAGGCCCT 16

RESULT 361  
US-10-307-005-752/c  
; Sequence 752, Application US/10307005  
; Publication No. US20030236208A1  
; GENERAL INFORMATION:  
; APPLICANT: University of Delaware  
; APPLICANT: Eric B. Kmiec  
; APPLICANT: Howard B. Gamper

; APPLICANT: Michael C. Rice  
; APPLICANT: Jungsup Kim  
; TITLE OF INVENTION: Targeted Chromosomal Genomic Alterations in Plants  
; FILE OF INVENTION: Using Modified Single Stranded Oligonucleotides  
; FILE REFERENCE: Napro/009 PCT  
; CURRENT APPLICATION NUMBER: US/10/307,005  
; CURRENT FILING DATE: 2002-11-26  
; PRIOR APPLICATION NUMBER: PCT/US01/17672  
; PRIOR FILING DATE: 2001-06-01  
; PRIOR APPLICATION NUMBER: US 60/208,538  
; PRIOR FILING DATE: 2000-06-01  
; PRIOR APPLICATION NUMBER: US 60/244,989  
; PRIOR FILING DATE: 2000-10-30  
; PRIOR APPLICATION NUMBER: US 09/818,875  
; PRIOR FILING DATE: 2001-03-27  
; NUMBER OF SEQ ID NOS: 2717  
; SOFTWARE: Friedman macro Napro4  
; SEQ ID NO 752  
; LENGTH: 17  
; TYPE: DNA  
; ORGANISM: Zea mays  
US-10-307-005-752

Query Match 2.8%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 87.5%; Pred. No. 2.7e+02;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 410 CTGAGCTGTGGGCGT 425  
Db 17 CTGAGCTGAGGGCGT 2

RESULT 362  
US-10-342-902-1053/c  
; Sequence 1053, Application US/10342902  
; Publication No. US20040054156A1  
; GENERAL INFORMATION:  
; APPLICANT: Sinna Therapeutics, Inc.  
; APPLICANT: Draper, Kenneth  
; APPLICANT: Blatt, Larry  
; APPLICANT: McSwiggen, Jim  
; APPLICANT: Morrissey, Dave  
; TITLE OF INVENTION: Method and Reagent for Inhibiting Hepatitis B Virus Replication  
; FILE REFERENCE: 400/075 (MHB00-845-I)  
; CURRENT APPLICATION NUMBER: US/10/342,902  
; CURRENT FILING DATE: 2003-01-15  
; PRIOR APPLICATION NUMBER: US 09/877,478  
; PRIOR FILING DATE: 2001-06-08  
; PRIOR APPLICATION NUMBER: US 09/531,025  
; PRIOR FILING DATE: 2000-03-20  
; PRIOR APPLICATION NUMBER: US 09/636,385  
; PRIOR FILING DATE: 2000-08-09  
; PRIOR APPLICATION NUMBER: US 09/696,347  
; PRIOR FILING DATE: 2000-10-24  
; PRIOR APPLICATION NUMBER: US 08/193,627  
; PRIOR FILING DATE: 1994-02-07  
; PRIOR APPLICATION NUMBER: US 07/882,712  
; PRIOR FILING DATE: 1992-05-14  
; PRIOR APPLICATION NUMBER: US 09/436,430  
; PRIOR FILING DATE: 1999-11-08  
; NUMBER OF SEQ ID NOS: 6592  
; SOFTWARE: PatentIn version 3.2  
; SEQ ID NO 1053  
; LENGTH: 17  
; TYPE: RNA  
; ORGANISM: Hepatitis B virus  
US-10-342-902-1053

Query Match 2.8%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 87.5%; Pred. No. 2.7e+02;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 117 AGCGGCGGAAAGGCC 132

Db 16 AGCGGCGGTAGAGCC 1

RESULT 363  
US-10-138-674-8374/c  
; Sequence 8374, Application US/10138674  
; Publication No. US20040077565A1  
; GENERAL INFORMATION:  
; APPLICANT: Ribozyme Pharmaceuticals, Inc.  
; APPLICANT: Pavco, Pam  
; APPLICANT: McSwiggen, Jim  
; APPLICANT: Stinchcomb, Dan  
; APPLICANT: Escobedo, Jaime  
; TITLE OF INVENTION: Method and Reagent for the Treatment of Diseases or Conditions Re  
; FILE OF INVENTION: Levels of Vascular Endothelial Growth Factor Receptor  
; FILE REFERENCE: MHB00-876-N (400/049)  
; CURRENT APPLICATION NUMBER: US/10/138,674  
; CURRENT FILING DATE: 2002-05-03  
; NUMBER OF SEQ ID NOS: 20822  
; SOFTWARE: PatentIn version 3.0  
; SEQ ID NO 8374  
; LENGTH: 17  
; TYPE: RNA  
; ORGANISM: Homo sapiens  
US-10-138-674-8374

Query Match 2.8%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 87.5%; Pred. No. 2.7e+02;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 363 GCCGCAGGAAGAGGAA 378  
Db 17 GCCGCAGGCAGAGGAA 2

RESULT 364  
US-10-287-949A-8374/c  
; Sequence 8374, Application US/10287949A  
; Publication No. US20040102389A1  
; GENERAL INFORMATION:  
; APPLICANT: Ribozyme Pharmaceuticals, Inc.  
; APPLICANT: Pavco, Pam  
; APPLICANT: McSwiggen, Jim  
; APPLICANT: Stinchcomb, Dan  
; APPLICANT: Escobedo, Jaime  
; TITLE OF INVENTION: Method and Reagent for the Treatment of Diseases or Conditions Re  
; FILE REFERENCE: MHB00-876-N (400/049)  
; CURRENT APPLICATION NUMBER: US/10/287,949A  
; CURRENT FILING DATE: 2003-04-11  
; NUMBER OF SEQ ID NOS: 20822  
; SOFTWARE: PatentIn version 3.0  
; SEQ ID NO 8374  
; LENGTH: 17  
; TYPE: RNA  
; ORGANISM: Homo sapiens  
US-10-287-949A-8374

Query Match 2.8%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 87.5%; Pred. No. 2.7e+02;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 363 GCCGCAGGAAGAGGAA 378  
Db 17 GCCGCAGGCAGAGGAA 2

RESULT 365  
US-10-712-672-757/c  
; Sequence 757, Application US/10712672  
; Publication No. US20040102413A1  
; GENERAL INFORMATION:

```
; APPLICANT: Ribozyme Pharmaceuticals, Inc.
; APPLICANT: Chowrira, Bharat
; APPLICANT: McSwiggen, Jim
; APPLICANT: Stinchcomb, Dan
; TITLE OF INVENTION: Method and Reagent for the Inhibition of Telomerase Enzyme
; FILE REFERENCE: MBH00-882-C (400/019)
; CURRENT APPLICATION NUMBER: US/10/712,672
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US/09/653,225
; PRIOR FILING DATE: 2000-08-31
; PRIOR APPLICATION NUMBER: 60/197,769
; PRIOR FILING DATE: 2000-04-14
; PRIOR APPLICATION NUMBER: 60/150,713
; PRIOR FILING DATE: 1999-08-31
; NUMBER OF SEQ ID NOS: 5586
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 757
; LENGTH: 17
; TYPE: RNA
; ORGANISM: Homo sapiens
US-10-712-672-757

Query Match          2.8%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 2.7e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 263 GCCCGGGGGCTTCCTC 278
Db 16 GCCTGGGGCTTCCTC 1

RESULT 366
US-10-712-672-1149/c
; Sequence 1149, Application US/10712672
; Publication No. US20040102413A1
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals, Inc.
; APPLICANT: Chowrira, Bharat
; APPLICANT: McSwiggen, Jim
; APPLICANT: Stinchcomb, Dan
; TITLE OF INVENTION: Method and Reagent for the Inhibition of Telomerase Enzyme
; FILE REFERENCE: MBH00-882-C (400/019)
; CURRENT APPLICATION NUMBER: US/10/712,672
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US/09/653,225
; PRIOR FILING DATE: 2000-08-31
; PRIOR APPLICATION NUMBER: 60/197,769
; PRIOR FILING DATE: 2000-04-14
; PRIOR APPLICATION NUMBER: 60/150,713
; PRIOR FILING DATE: 1999-08-31
; NUMBER OF SEQ ID NOS: 5586
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 1149
; LENGTH: 17
; TYPE: RNA
; ORGANISM: Homo sapiens
US-10-712-672-1149

Query Match          2.8%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 2.7e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 246 GCCTGAGCGCGGT 261
Db 16 GCCTGAAGCGCGGT 1

RESULT 367
US-10-669-841-1053/c
; Sequence 1053, Application US/10669841
; Publication No. US20040127446A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
```

```
; APPLICANT: Lawrence, Blatt
; APPLICANT: Dennis, Macejak
; APPLICANT: James, McSwiggen
; APPLICANT: David, Morrissey
; APPLICANT: Pamela, Pavco
; APPLICANT: Patrice, Lee
; APPLICANT: Kenneth, Draper
; APPLICANT: Elisabeth, Roberts
; TITLE OF INVENTION: OLIGONUCLEOTIDE MEDIATED INHIBITION OF HEPATITIS B VIRUS AND HEP
; FILE REFERENCE: 400/042US (MBH02-249-E)
; CURRENT APPLICATION NUMBER: US/10/669,841
; CURRENT FILING DATE: 2003-09-23
; PRIOR APPLICATION NUMBER: PCT/US02/09187
; PRIOR FILING DATE: 2002-03-26
; PRIOR APPLICATION NUMBER: US 60/296,876
; PRIOR FILING DATE: 2001-06-08
; PRIOR APPLICATION NUMBER: US 60/335,059
; PRIOR FILING DATE: 2001-10-24
; PRIOR APPLICATION NUMBER: US 60/337,055
; PRIOR FILING DATE: 2001-12-05
; PRIOR APPLICATION NUMBER: US 60/358,580
; PRIOR FILING DATE: 2002-02-20
; PRIOR APPLICATION NUMBER: US 60/363,124
; PRIOR FILING DATE: 2002-03-11
; PRIOR APPLICATION NUMBER: US 09/817,879
; PRIOR FILING DATE: 2001-03-26
; PRIOR APPLICATION NUMBER: US 09/740,332
; PRIOR FILING DATE: 2000-12-18
; PRIOR APPLICATION NUMBER: US 09/611,931
; PRIOR FILING DATE: 2000-07-07
; PRIOR APPLICATION NUMBER: US 09/504,321
; PRIOR FILING DATE: 2000-02-15
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 16207
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 1053
; LENGTH: 17
; TYPE: RNA
; ORGANISM: Hepatitis B Virus
US-10-669-841-1053

Query Match          2.8%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 2.7e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 117 AGCGGGCGGAAAGCC 132
Db 16 AGCGGGCGGTAGAGCC 1

RESULT 368
US-10-669-841-4018
; Sequence 4018, Application US/10669841
; Publication No. US20040127446A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: Lawrence, Blatt
; APPLICANT: Dennis, Macejak
; APPLICANT: James, McSwiggen
; APPLICANT: David, Morrissey
; APPLICANT: Pamela, Pavco
; APPLICANT: Patrice, Lee
; APPLICANT: Kenneth, Draper
; APPLICANT: Elisabeth, Roberts
; TITLE OF INVENTION: OLIGONUCLEOTIDE MEDIATED INHIBITION OF HEPATITIS B VIRUS AND HEP
; FILE REFERENCE: 400/042US (MBH02-249-E)
; CURRENT APPLICATION NUMBER: US/10/669,841
; CURRENT FILING DATE: 2003-09-23
; PRIOR APPLICATION NUMBER: PCT/US02/09187
; PRIOR FILING DATE: 2002-03-26
; PRIOR APPLICATION NUMBER: US 60/296,876
```

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; PRIOR FILING DATE: 2001-06-08
; PRIOR APPLICATION NUMBER: US 60/335,059
; PRIOR FILING DATE: 2001-10-24
; PRIOR APPLICATION NUMBER: US 60/337,055
; PRIOR FILING DATE: 2001-12-05
; PRIOR APPLICATION NUMBER: US 60/358,580
; PRIOR FILING DATE: 2002-02-20
; PRIOR APPLICATION NUMBER: US 60/363,124
; PRIOR FILING DATE: 2002-03-11
; PRIOR APPLICATION NUMBER: US 09/817,879
; PRIOR FILING DATE: 2001-03-26
; PRIOR APPLICATION NUMBER: US 09/740,332
; PRIOR FILING DATE: 2000-12-18
; PRIOR APPLICATION NUMBER: US 09/611,931
; PRIOR FILING DATE: 2000-07-07
; PRIOR APPLICATION NUMBER: US 09/504,321
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 16207
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 4018
; LENGTH: 17
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Nucleic Acid
; NAME/KEY: misc_feature
; LOCATION:
; OTHER INFORMATION: oligonucleotide substrate
; US-10-669-841-4018
```

```
Query Match 2.8%; Score 12.8; DB 1; Length 17;
Best Local Similarity 75.0%; Pred. No. 2.7e+02;
Matches 12; Conservative 2; Mismatches 2; Indels 0; Gaps 0;
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```
QY 20 TGGAGGGGTGGTGGC 35
Db :|||||:|:|
2 UGGAGGGGUGGGUGGC 17
```

```
RESULT 369
US-10-669-841-6232/c
; Sequence 6232, Application US/10669841
; Publication No. US2004012746A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: Lawrence, Blatt
; APPLICANT: Dennis, Macejak
; APPLICANT: James, McSwiggen
; APPLICANT: David, Morrissey
; APPLICANT: Pamela, Pavco
; APPLICANT: Patrice, Lee
; APPLICANT: Kenneth, Draper
; APPLICANT: Elisabeth, Roberts
; TITLE OF INVENTION: OLIGONUCLEOTIDE MEDIATED INHIBITION OF HEPATITIS B VIRUS AND HEPA
; FILE REFERENCE: 400/042US (MEHB02-249-E)
; CURRENT APPLICATION NUMBER: US/10/669,841
; CURRENT FILING DATE: 2003-09-23
; PRIOR APPLICATION NUMBER: PCT/US02/09187
; PRIOR FILING DATE: 2002-03-26
; PRIOR APPLICATION NUMBER: US 60/296,876
; PRIOR FILING DATE: 2001-06-08
; PRIOR APPLICATION NUMBER: US 60/335,059
; PRIOR FILING DATE: 2001-10-24
; PRIOR APPLICATION NUMBER: US 60/337,055
; PRIOR FILING DATE: 2001-12-05
; PRIOR APPLICATION NUMBER: US 60/358,580
; PRIOR FILING DATE: 2002-03-26
; PRIOR APPLICATION NUMBER: PCT/US02/09187
; PRIOR FILING DATE: 2001-06-08
; PRIOR APPLICATION NUMBER: US 60/335,059
; PRIOR FILING DATE: 2001-10-24
; PRIOR APPLICATION NUMBER: US 60/337,055
; PRIOR FILING DATE: 2001-12-05
; PRIOR APPLICATION NUMBER: US 60/358,580
; PRIOR FILING DATE: 2002-02-20
; PRIOR APPLICATION NUMBER: US 60/363,124
; PRIOR FILING DATE: 2002-03-11
; PRIOR APPLICATION NUMBER: US 09/817,879
; PRIOR FILING DATE: 2000-12-18
; PRIOR APPLICATION NUMBER: US 09/611,931
; PRIOR FILING DATE: 2000-07-07
; PRIOR APPLICATION NUMBER: US 09/504,321
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 16207
; SOFTWARE: PatentIn version 3.0
```

```
; PRIOR FILING DATE: 2001-03-26
; PRIOR APPLICATION NUMBER: US 09/740,332
; PRIOR FILING DATE: 2000-12-18
; PRIOR APPLICATION NUMBER: US 09/611,931
; PRIOR FILING DATE: 2000-07-07
; PRIOR APPLICATION NUMBER: US 09/504,321
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 16207
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 6232
; LENGTH: 17
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Nucleic Acid
; NAME/KEY: misc_feature
; LOCATION:
; OTHER INFORMATION: oligonucleotide substrate
; US-10-669-841-6232
```

```
Query Match 2.8%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 2.7e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 208 GGACCTGCGGGGCTC 223
Db :|||||:|:|
16 GCACCTGCGGGGCTC 1
```

```
RESULT 370
US-10-669-841-6348/c
; Sequence 6348, Application US/10669841
; Publication No. US2004012746A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: Lawrence, Blatt
; APPLICANT: Dennis, Macejak
; APPLICANT: James, McSwiggen
; APPLICANT: David, Morrissey
; APPLICANT: Pamela, Pavco
; APPLICANT: Patrice, Lee
; APPLICANT: Kenneth, Draper
; APPLICANT: Elisabeth, Roberts
; TITLE OF INVENTION: OLIGONUCLEOTIDE MEDIATED INHIBITION OF HEPATITIS B VIRUS AND HEPA
; FILE REFERENCE: 400/042US (MEHB02-249-E)
; CURRENT APPLICATION NUMBER: US/10/669,841
; CURRENT FILING DATE: 2003-09-23
; PRIOR APPLICATION NUMBER: PCT/US02/09187
; PRIOR FILING DATE: 2002-03-26
; PRIOR APPLICATION NUMBER: US 60/296,876
; PRIOR FILING DATE: 2001-06-08
; PRIOR APPLICATION NUMBER: US 60/335,059
; PRIOR FILING DATE: 2001-10-24
; PRIOR APPLICATION NUMBER: US 60/337,055
; PRIOR FILING DATE: 2001-12-05
; PRIOR APPLICATION NUMBER: US 60/358,580
; PRIOR FILING DATE: 2002-02-20
; PRIOR APPLICATION NUMBER: US 60/363,124
; PRIOR FILING DATE: 2002-03-11
; PRIOR APPLICATION NUMBER: US 09/817,879
; PRIOR FILING DATE: 2001-03-26
; PRIOR APPLICATION NUMBER: US 09/740,332
; PRIOR FILING DATE: 2000-12-18
; PRIOR APPLICATION NUMBER: US 09/611,931
; PRIOR FILING DATE: 2000-07-07
; PRIOR APPLICATION NUMBER: US 09/504,321
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 16207
; SOFTWARE: PatentIn version 3.0
```

```
; SEQ ID NO 6348
; LENGTH: 17
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Nucleic Acid
; NAME/KEY: misc_feature
; LOCATION:
; OTHER INFORMATION: oligonucleotide substrate
US-10-669-841-6348

Query Match          2.8%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 2.7e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 433 GGACTCGGCTCACACA 448
DB 17 GGACTGGGCCACACA 2

RESULT 371
US-10-712-633-3415/c
; Sequence 3415, Application US/10712633
; Publication No. US20040220128A1
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals, Inc.
; APPLICANT: Pavco, Pamela
; APPLICANT: Sandberg, Jennifer
; APPLICANT: Gordon, Gilad
; APPLICANT: McSwiggen, James
; APPLICANT: Stinchcomb, Dan
; TITLE OF INVENTION: NUCLEIC ACID BASED MODULATION OF VASCULAR ENDOTHELIAL GROWTH FACT
; FILE REFERENCE: MBHB02-325PCT (400/047)
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US/10/712,633
; PRIOR FILING DATE: 2003-11-13
; PRIOR FILING DATE: 1995-10-26
; PRIOR FILING DATE: 1995-10-26
; PRIOR FILING DATE: 1996-01-08
; PRIOR FILING DATE: 1999-08-10
; PRIOR FILING DATE: 2000-11-07
; PRIOR FILING DATE: 2000-11-07
; PRIOR FILING DATE: 2001-05-29
; PRIOR FILING DATE: 2001-11-30
; PRIOR FILING DATE: 2002-05-03
; NUMBER OF SEQ ID NOS: 5989
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 3415
; LENGTH: 17
; TYPE: RNA
; ORGANISM: Homo Sapiens
US-10-712-633-3415

Query Match          2.8%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 2.7e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 363 GCCGAGGAGGAGGAA 378
DB 17 GCCGAGGAGGAGGAA 2

RESULT 372
US-10-724-270-1379/c
; Sequence 1379, Application US/10724270
; Publication No. US20050080031A1
; GENERAL INFORMATION:
```

```
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; TITLE OF INVENTION: Nucleic Acid Treatment of Diseases or Conditions Related to Level
; FILE REFERENCE: 400/046-US (MBHB02-326-A)
; CURRENT FILING DATE: 2003-11-26
; PRIOR APPLICATION NUMBER: PCT/US02/16840
; PRIOR FILING DATE: 2002-05-29
; PRIOR APPLICATION NUMBER: US 60/318,471
; PRIOR FILING DATE: 2001-09-10
; PRIOR APPLICATION NUMBER: US 60/296,249
; PRIOR FILING DATE: 2001-06-06
; PRIOR APPLICATION NUMBER: US 60/294,140
; PRIOR FILING DATE: 2001-05-29
; PRIOR APPLICATION NUMBER: US 10/238,700
; PRIOR FILING DATE: 2002-09-10
; PRIOR APPLICATION NUMBER: US 10/163,552
; PRIOR FILING DATE: 2002-06-06
; PRIOR APPLICATION NUMBER: US 10/157,580
; PRIOR FILING DATE: 2002-05-29
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2002-10-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: US 10/417,012
; PRIOR FILING DATE: 2003-04-16
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 6810
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 1379
; LENGTH: 17
; TYPE: RNA
; ORGANISM: Homo sapiens
US-10-724-270-1379

Query Match          2.8%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 2.7e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 254 GCCGCGGTGCGCCGCG 269
DB 16 GCCGCGGTGCGCCGCG 1

RESULT 373
US-10-724-270-1500
; Sequence 1500, Application US/10724270
; Publication No. US20050080031A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; TITLE OF INVENTION: Nucleic Acid Treatment of Diseases or Conditions Related to Level
; FILE REFERENCE: 400/046-US (MBHB02-326-A)
; CURRENT FILING DATE: 2003-11-26
; PRIOR APPLICATION NUMBER: PCT/US02/16840
; PRIOR FILING DATE: 2002-05-29
; PRIOR APPLICATION NUMBER: US 60/318,471
; PRIOR FILING DATE: 2001-09-10
; PRIOR APPLICATION NUMBER: US 60/296,249
; PRIOR FILING DATE: 2001-06-06
; PRIOR APPLICATION NUMBER: US 60/294,140
; PRIOR FILING DATE: 2001-05-29
; PRIOR APPLICATION NUMBER: US 10/238,700
; PRIOR FILING DATE: 2002-09-10
; PRIOR APPLICATION NUMBER: US 10/163,552
; PRIOR FILING DATE: 2002-06-06
; PRIOR APPLICATION NUMBER: US 10/157,580
; PRIOR FILING DATE: 2002-05-29
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2002-10-23
; GENERAL INFORMATION:
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; PRIOR APPLICATION NUMBER: US 10/444,853  
; PRIOR FILING DATE: 2003-05-23  
; PRIOR APPLICATION NUMBER: US 10/417,012  
; PRIOR FILING DATE: 2003-04-16  
; Remaining Prior Application data removed - See File Wrapper or PALM.  
; NUMBER OF SEQ ID NOS: 6810  
; SOFTWARE: PatentIn version 3.0  
; SEQ ID NO 1500  
; LENGTH: 17  
; TYPE: RNA  
; ORGANISM: Homo sapiens  
US-10-724-270-1500

Query Match 2.8%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 75.0%; Pred. No. 2.7e+02;  
Matches 12; Conservative 2; Mismatches 2; Indels 0; Gaps 0;

Qy 202 TCCGGGGACCTGGCG 217  
:|||||:|||||  
Db 1 UCCUGGGGCCUGCGG 16

## RESULT 374

US-10-724-270-2187/c  
; Sequence 2187, Application US/10724270  
; Publication No. US20050080031A1  
; GENERAL INFORMATION:  
; APPLICANT: Sirna Therapeutics, Inc.  
; TITLE OF INVENTION: Nucleic Acid Treatment of Diseases or Conditions Related to Level

; FILE OF INVENTION: RAS, HER2 and HIV  
; FILE REFERENCE: 400/046-US (MBH02-326-A)  
; CURRENT APPLICATION NUMBER: US/10/724,270  
; CURRENT FILING DATE: 2003-11-26  
; PRIOR APPLICATION NUMBER: PCT/US02/16840  
; PRIOR FILING DATE: 2002-05-29  
; PRIOR APPLICATION NUMBER: US 60/318,471  
; PRIOR FILING DATE: 2001-09-10  
; PRIOR APPLICATION NUMBER: US 60/296,249  
; PRIOR FILING DATE: 2001-06-06  
; PRIOR APPLICATION NUMBER: US 60/294,140  
; PRIOR FILING DATE: 2001-05-29  
; PRIOR APPLICATION NUMBER: US 10/238,700  
; PRIOR FILING DATE: 2002-09-10  
; PRIOR APPLICATION NUMBER: US 10/163,552  
; PRIOR FILING DATE: 2002-06-06  
; PRIOR APPLICATION NUMBER: US 10/157,580  
; PRIOR FILING DATE: 2002-05-29  
; PRIOR APPLICATION NUMBER: US 10/693,059  
; PRIOR FILING DATE: 2002-10-23  
; PRIOR APPLICATION NUMBER: US 10/444,853  
; PRIOR FILING DATE: 2003-04-16  
; Remaining Prior Application data removed - See File Wrapper or PALM.  
; NUMBER OF SEQ ID NOS: 6810  
; SOFTWARE: PatentIn version 3.0  
; SEQ ID NO 2187  
; LENGTH: 17  
; TYPE: RNA  
; ORGANISM: Homo sapiens  
US-10-724-270-2187

Query Match 2.8%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 87.5%; Pred. No. 2.7e+02;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 226 CTGCCAGCCCGCGAA 241  
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Db 17 CTGCCAGCCCGGTA 2

## RESULT 375

US-10-724-270-4675/c  
; Sequence 4675, Application US/10724270  
; Publication No. US20050080031A1  
; GENERAL INFORMATION:  
; APPLICANT: Sirna Therapeutics, Inc.  
; TITLE OF INVENTION: Nucleic Acid Treatment of Diseases or Conditions Related to Level  
; FILE OF INVENTION: RAS, HER2 and HIV  
; FILE REFERENCE: 400/046-US (MBH02-326-A)  
; CURRENT APPLICATION NUMBER: US/10/724,270  
; CURRENT FILING DATE: 2003-11-26  
; PRIOR APPLICATION NUMBER: PCT/US02/16840  
; PRIOR FILING DATE: 2002-05-29  
; PRIOR APPLICATION NUMBER: US 60/318,471  
; PRIOR FILING DATE: 2001-09-10  
; PRIOR APPLICATION NUMBER: US 60/296,249  
; PRIOR FILING DATE: 2001-06-06  
; PRIOR APPLICATION NUMBER: US 60/294,140  
; PRIOR FILING DATE: 2001-05-29  
; PRIOR APPLICATION NUMBER: US 10/238,700  
; PRIOR FILING DATE: 2002-09-10  
; PRIOR APPLICATION NUMBER: US 10/163,552  
; PRIOR FILING DATE: 2002-06-06  
; PRIOR APPLICATION NUMBER: US 10/157,580  
; PRIOR FILING DATE: 2002-05-29  
; PRIOR APPLICATION NUMBER: US 10/693,059  
; PRIOR FILING DATE: 2002-10-23  
; PRIOR APPLICATION NUMBER: US 10/444,853  
; PRIOR FILING DATE: 2003-05-23  
; PRIOR APPLICATION NUMBER: US 10/417,012  
; Remaining Prior Application data removed - See File Wrapper or PALM.  
; NUMBER OF SEQ ID NOS: 6810  
; SOFTWARE: PatentIn version 3.0  
; SEQ ID NO 4675  
; LENGTH: 17  
; TYPE: RNA  
; ORGANISM: Homo sapiens  
US-10-724-270-4675

Query Match 2.8%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 87.5%; Pred. No. 2.7e+02;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 21 GCGAGGGGTGGTGGCC 36  
Db 17 GCGAGGGGTGGGCGCC 2

## RESULT 376

US-10-724-270-5524/c  
; Sequence 5524, Application US/10724270  
; Publication No. US20050080031A1  
; GENERAL INFORMATION:  
; APPLICANT: Sirna Therapeutics, Inc.  
; TITLE OF INVENTION: Nucleic Acid Treatment of Diseases or Conditions Related to Level  
; FILE OF INVENTION: RAS, HER2 and HIV  
; FILE REFERENCE: 400/046-US (MBH02-326-A)  
; CURRENT APPLICATION NUMBER: US/10/724,270  
; CURRENT FILING DATE: 2003-11-26  
; PRIOR APPLICATION NUMBER: PCT/US02/16840  
; PRIOR FILING DATE: 2002-05-29  
; PRIOR APPLICATION NUMBER: US 60/318,471  
; PRIOR FILING DATE: 2001-09-10  
; PRIOR APPLICATION NUMBER: US 60/296,249  
; PRIOR FILING DATE: 2001-06-06  
; PRIOR APPLICATION NUMBER: US 60/294,140  
; PRIOR FILING DATE: 2001-05-29  
; PRIOR APPLICATION NUMBER: US 10/238,700  
; PRIOR FILING DATE: 2002-09-10  
; PRIOR APPLICATION NUMBER: US 10/163,552  
; PRIOR FILING DATE: 2002-06-06



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; PRIOR APPLICATION NUMBER: US 10/157,580
; PRIOR FILING DATE: 2002-05-29
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2002-10-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: US 10/417,012
; PRIOR FILING DATE: 2003-04-16
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 6810
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 5524
; LENGTH: 17
; TYPE: RNA
; ORGANISM: Homo sapiens
US-10-724-270-5524

Query Match      2.8%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 2.7e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy      6 GCGGAGGGTGGGCGCTG 21
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Search completed: August 24, 2005, 14:36:14  
Job time : 4 secs

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